


TC-D607

SERVICE MANUAL

*AEP Model
UK Model
E Model
Australian Model*



• This set is the cassette deck section in LBT-D607/D607CD.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

Model Name Using Similar Mechanism	TC-H1600
Tape Transport Mechanism Type	DECK A : TCM-190RA12C DECK B : TCM-190RB22C

SPECIFICATIONS

Recording system	4-track 2-channel stereo
Frequency response	DOLBY NR OFF With Type IV cassette (Sony METAL-ES) 30 Hz to 15 kHz (± 3 dB) With Type II cassette (Sony UX-S) 40 Hz to 14 kHz (± 3 dB) With Type I cassette (Sony HF-S) 40 Hz to 14 kHz (± 3 dB)
Wow and flutter	$\pm 0.2\%$ (DIN)
Weight	Approx. 3.5 kg (8 lbs 1 oz)
Dimensions	Approx. 355 x 131 x 304 mm (14 x 5 1/4 x 12 inches) (w/h/d, including projections)

Design and specifications are subject to change without notice.

Note

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

STEREO CASSETTE DECK
SONY®



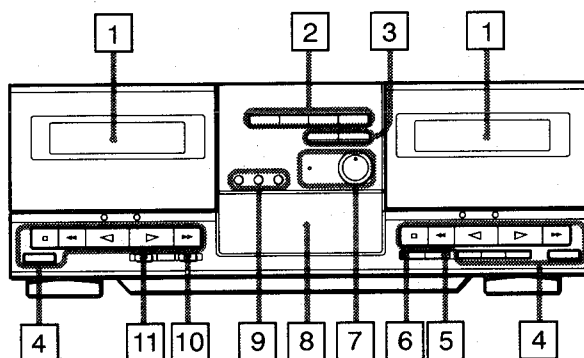
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SECTION 1 GENERAL

This section is extracted
from instruction manual.

Location of Controls



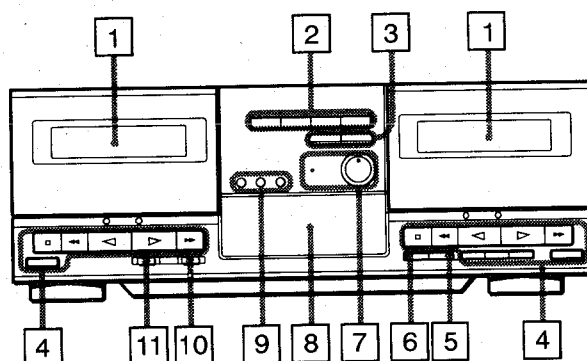
- 1 Cassette holders
- 2 AUTO CD SYNCHRO REC buttons and indicators
C.(Cross) FADE (29)
FADE (28)
EDIT (31)
TIME (31)
- 3 SYNCHRO DUBBING buttons (24)
- 4 Tape operation buttons
◀◀ Leftward fast winding/AMS*, ▶▶ Rightward fast winding/AMS*, ▶ Forward play, ◀ Reverse play, ■ Stop, ▲ EJECT, || PAUSE(deck B only), ○ REC MUTE Record muting (deck B only), ● REC Record (deck B only)
- 5 FADER button (22)
- 6 ARL (Automatic recording level) button and indicator (21)
- 7 REC (recording) LEVEL control and indicator (20)
- 8 Display window
- 9 COUNTER setting buttons (19)
A/B, MEMORY and RESET button
- 10 DOLBY NR (noise reduction) selector (20)
- 11 DIRECTION MODE selector (17, 20, 24)

* AMS is the abbreviation of Automatic Music Sensor.

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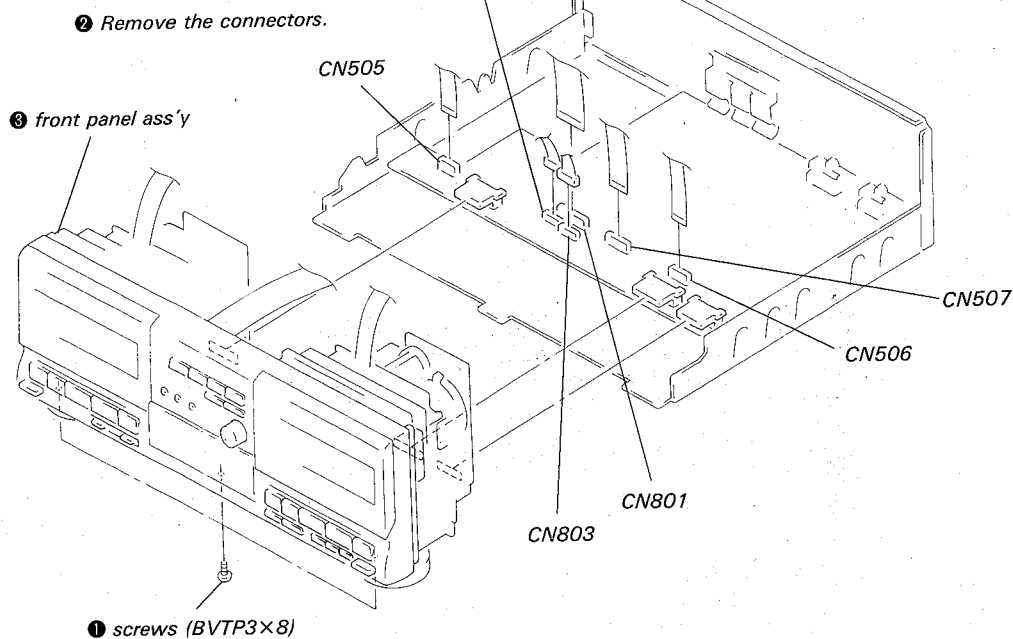
SECTION 2 DISASSEMBLY

NOTE: Follow the disassembly procedure in the numerical order given.

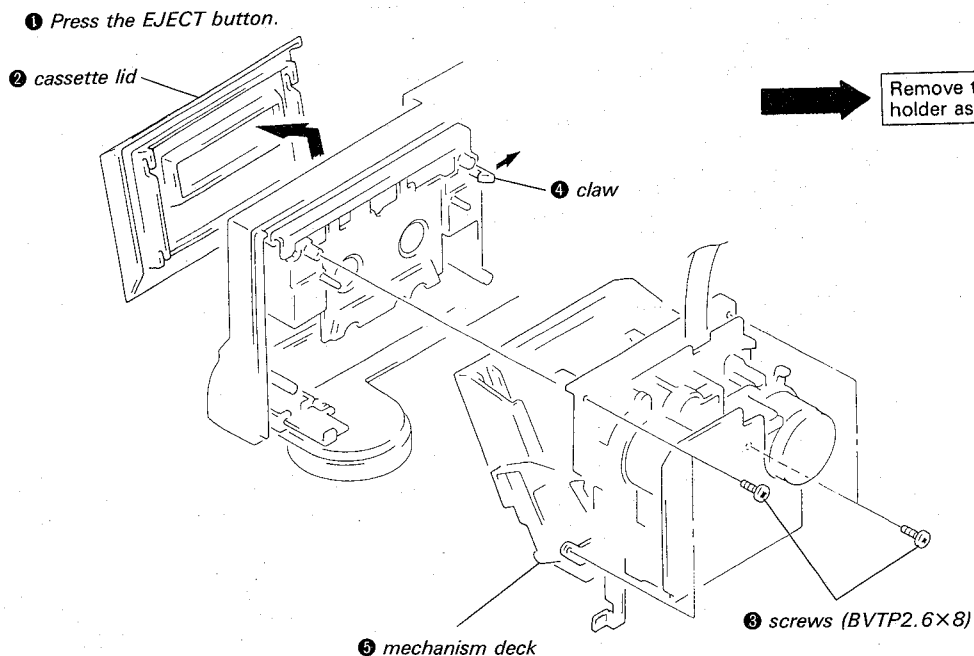
CASE

Unscrew the four case attachment screws M3×8 and remove the case.

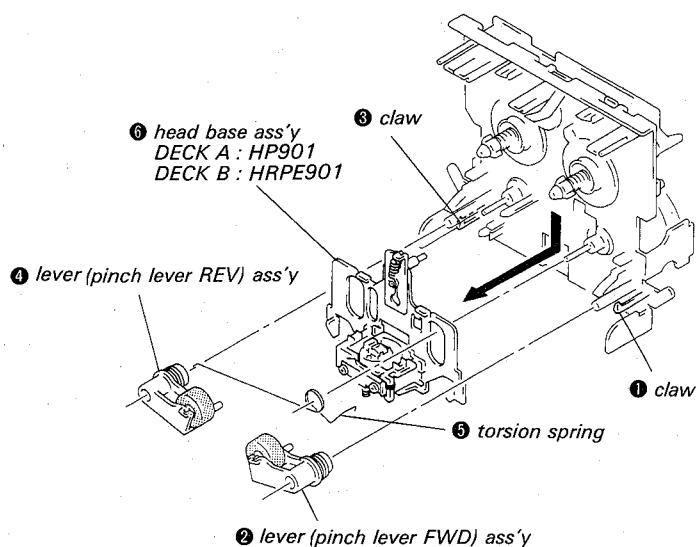
FRONT PANEL



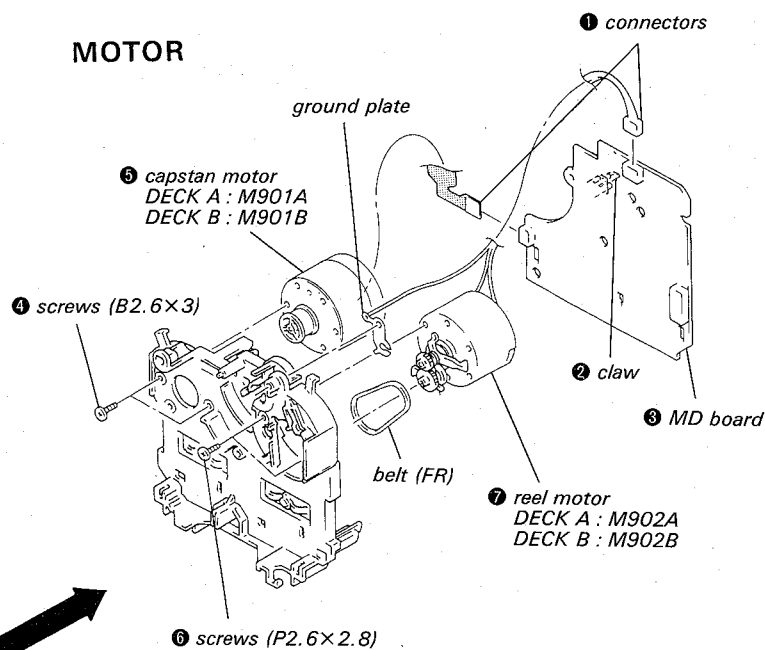
MECHANISM DECK



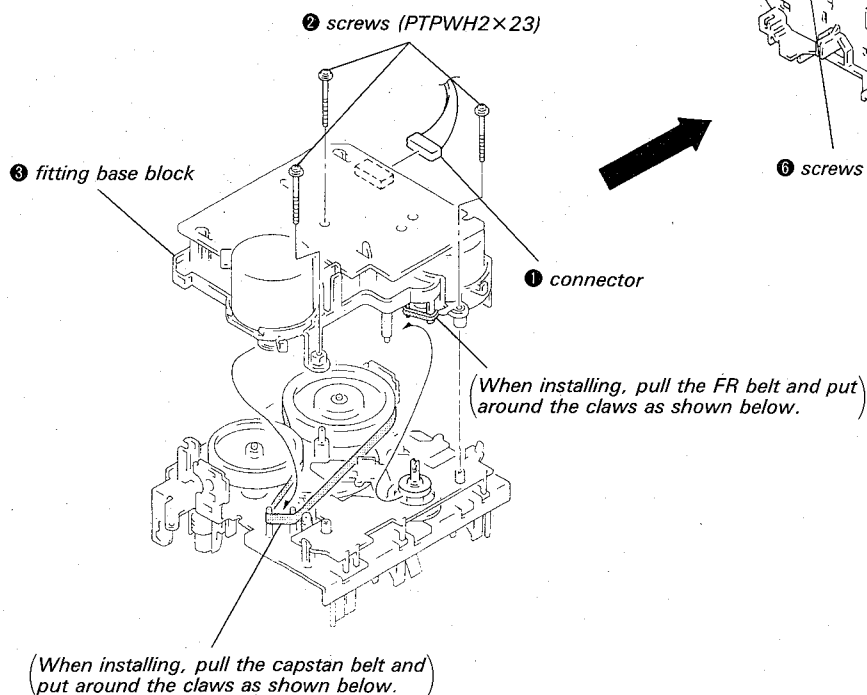
HEAD



MOTOR



FITTING BASE BLOCK



SECTION 3 MECHANICAL ADJUSTMENTS

PRECAUTION

- Clean the following parts with a denatured-alcoholmoistened swab;

record/playback/erase head	
pinch roller	rubber belts
capstan	idler
- Demagnetize the record/playback head with a head demagnetizer.
(Head demagnetizer do not approach for the erase head.)
- Do not use a magnetized screwdriver for the adjustments.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed in the rated power supply voltage unless otherwise noted.

Torque Measurement

Torque	Torque meter	Meter reading
FWD	CQ-102C	35 to 60g · cm (0.49 to 0.83 oz · inch)
FWD Back tension	CQ-102C	2 to 6g · cm (0.03 to 0.08 oz · inch)
REV	CQ-102RC	35 to 60g · cm (0.49 to 0.83 oz · inch)
REV Back tension	CQ-102RC	2 to 6g · cm (0.03 to 0.08 oz · inch)
FF, REW	CQ-201B	70 to 110g · cm (0.98 to 1.52 oz · inch)

SECTION 4 ELECTRICAL ADJUSTMENTS

Note: The adjustment should be performed in the order given in the service manual. As a rule, adjustment about playback should be performed before adjustment about recording. The adjustments should be performed for both L-CH and R-CH.

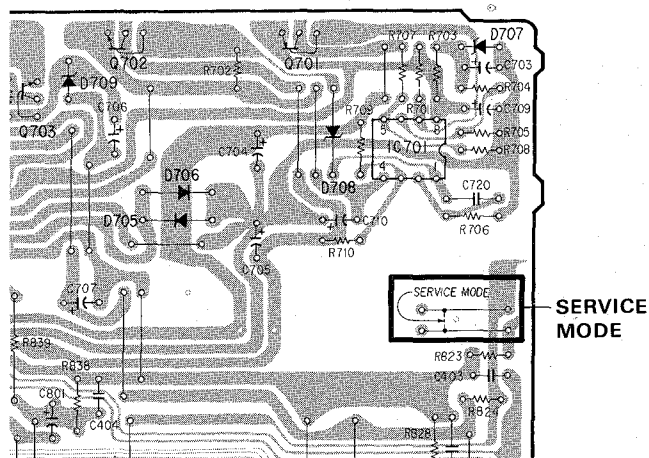
● Test Mode

The Test mode is activated by shorting Test Point Service mode (IC805 34 pin changes over to "L") with the POWER switch in OFF position, then turning on the POWER switch.

In this mode, the following functions operate:

- Source monitor
Line mute is cancelled during recording.
- High speed playback
High speed playback is executed when the HIGH SPEED (DUBBING) button is pressed during playback. Normal speed playback is restored when the button is pressed again.
- Record memory
The tape counter is reset to "0" at the record start point. After adjustment, open the Service mode to cancel the Test mode.

[MAIN BOARD] (CONDUCTOR SIDE)

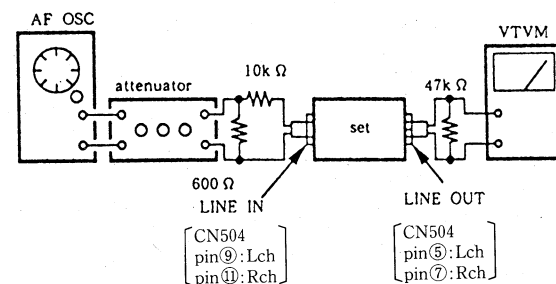


- Switches and controls should be set as follows unless otherwise specified.

NR switch : OFF
DIR MODE switch : \rightleftarrows

- Standard Record:
Deliver the standard input signal level to the input jack and set the REC LEVEL control to obtain the standard output signal level.

Record Mode



Standard Input Level

input terminal	LINE IN
source impedance	10kΩ
input level	0.25V (-10dB)

Standard Output Level

output terminal	LINE OUT
load impedance	47kΩ
output level	0.44V (-5dB)

Test tape

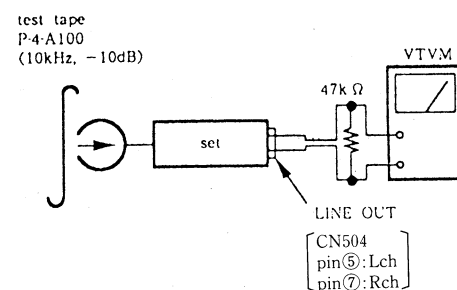
Type	Signal	Used for
P-4-A100	10kHz, -10dB	Azimuth Adjustment
P-4-L300	315Hz, 0dB	PB Level Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment

Record/Playback Head Azimuth Adjustment

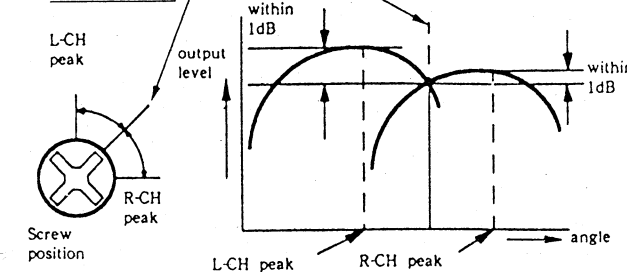
DECK A DECK B

Procedure :

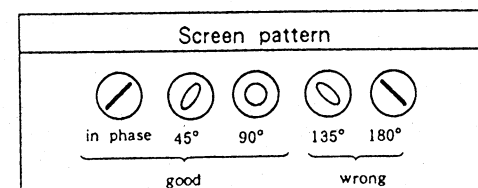
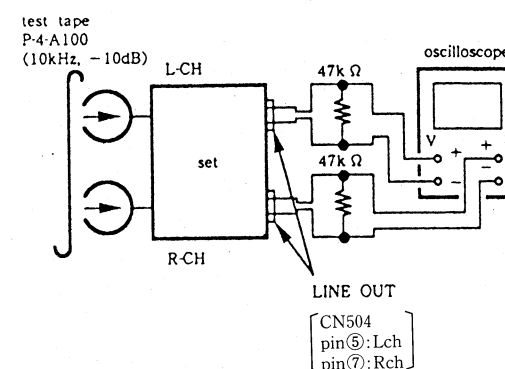
- Mode: FWD playback



- Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1dB.

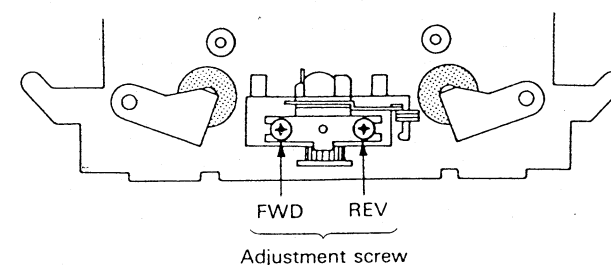


- Phase Check
Mode: playback



- Set in the REV mode and repeat the step 1-3.
- After the adjustment, lock the screws with locking compound.

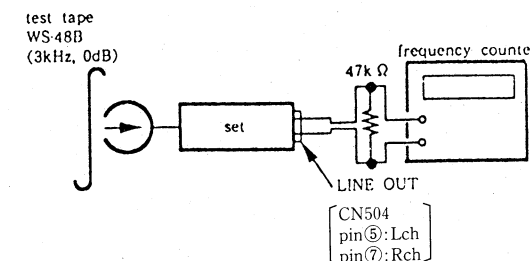
Adjustment Location : Record/playback head



Tape Speed Adjustment DECK A DECK B

Procedure :

Mode: playback



Perform high speed adjustment before normal speed adjustment.

(High speed adjustment)

- Continue pressing the SYNCHRO DUBBING HIGH SPEED switch.
- Check that frequency counter reading is within the standard value $6,000 \pm 60\text{Hz}$.
- If out of the standard, adjust each RV72 so that the frequency counter reading satisfies $6,000 \pm 60\text{Hz}$ on both A and B decks.

- Change over to Rev playback status, and repeat the above steps 1 to 3.

(Normal speed adjustment)

- Continue pressing the SYNCHRO DUBBING NORM SPEED switch.
- Check that the frequency counter reading is within the standard value $3,000 \pm 30\text{Hz}$.
- If out of the standard, adjust each RV71 so that the frequency counter reading satisfies $3,000 \pm 30\text{Hz}$ on both A and B decks.
- Change over to REV playback status, and repeat the above steps 1 to 3.

Frequency difference between the beginning and the end of the tape should be within 3%.

Frequency difference between deck A and deck B the beginning of the tape should be within 1.0%.

Adjustment Location :

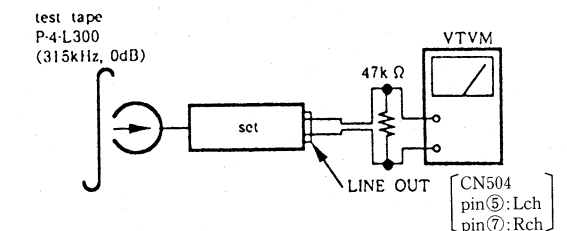
MD-A, MD-B board

Playback Level Adjustment

DECK A DECK B

Procedure :

Mode: playback



Adjust RV11 (L-CH), RV21 (R-CH) so that the reading on VTVM meets the adjustment limits below.

Adjustment Limits :

LINE OUT level: $-7.7 \pm 0.5\text{dB}$ (0.30 - 0.33V)

Level difference between channels: less than 0.5dB

Check that the LINE OUT level does not change in playback mode while changing the mode from playback to stop several times.

Adjustment Location : MD-A, MD-B board

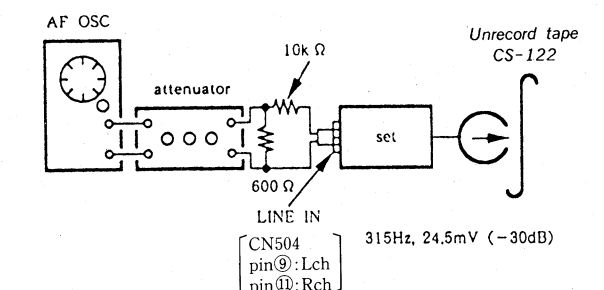
Record Bias Adjustment DECK B

Setting :

REC LEVEL control : Standard Record (See page 7).

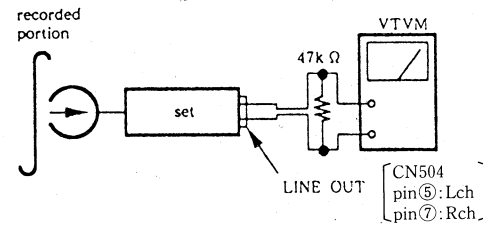
Procedure :

- Mode : record



5-1. CIRCUIT BOARDS LOCATION

2. Mode : playback



Playback the signal recorded in step 1.
Confirm that the 10kHz playback output is $0 \pm 0.5\text{dB}$ relative to the 315Hz output. If necessary, adjust RV12 (L-CH), RV22 (R-CH) and repeat the steps given above.

Adjustment Location : MD-B board

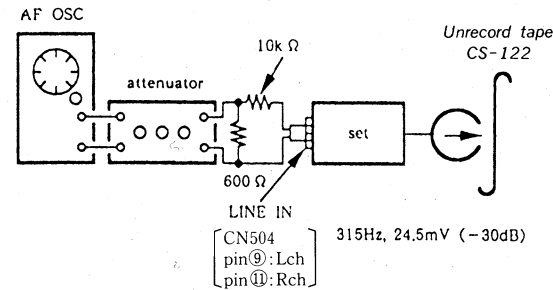
Record Level Adjustment **DECK B**

Setting :

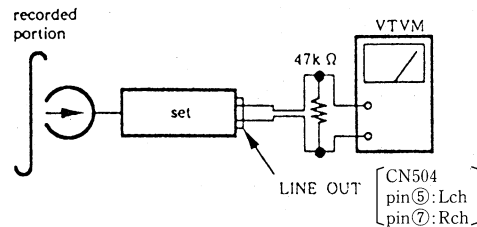
REC LEVEL control : Standard Record (See page 7).

Procedure :

1. Mode: record



2. Mode: playback



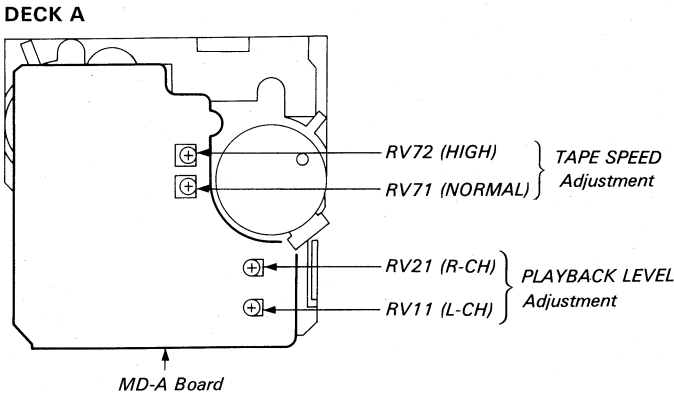
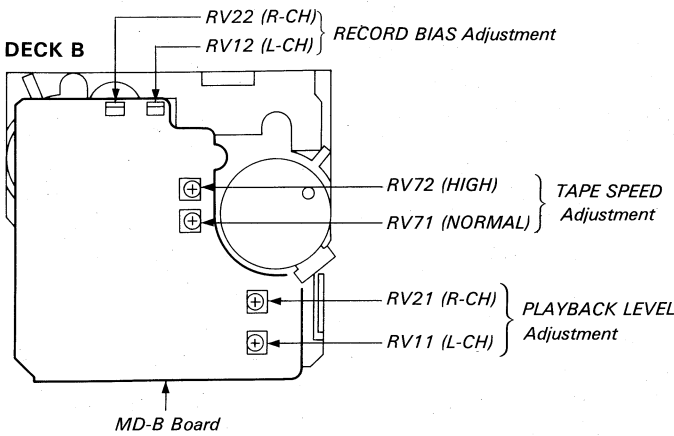
3. Playback the signal recorded in step 1.

Confirm that the signal level is within the adjustment limits below. If necessary, adjust RV101 (L-CH), RV201 (R-CH) and repeat the step 1-2.

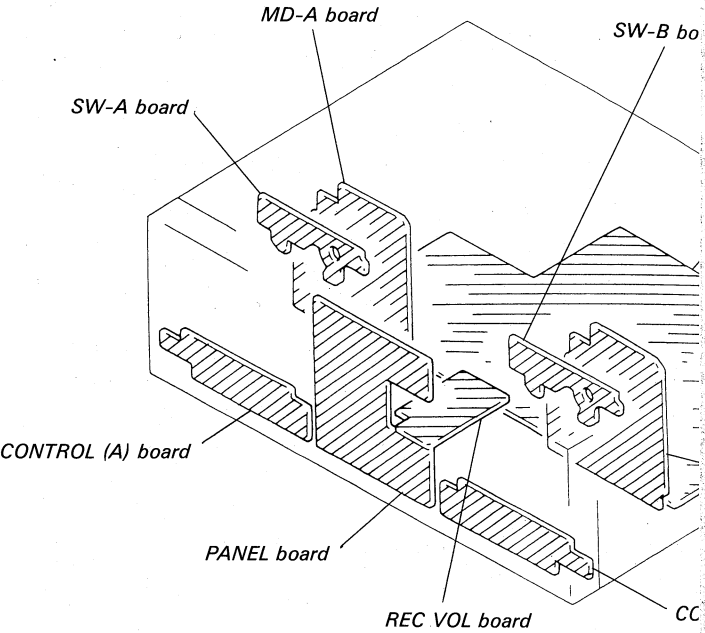
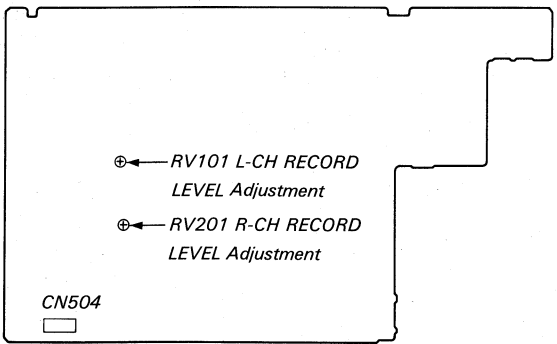
Adjustment Limits : $-7\text{dB} \pm 0.5\text{dB}$ (0.33—0.36V)

Adjustment Location : MAIN board (component side)

— Adjustment Parts Location Diagrams —

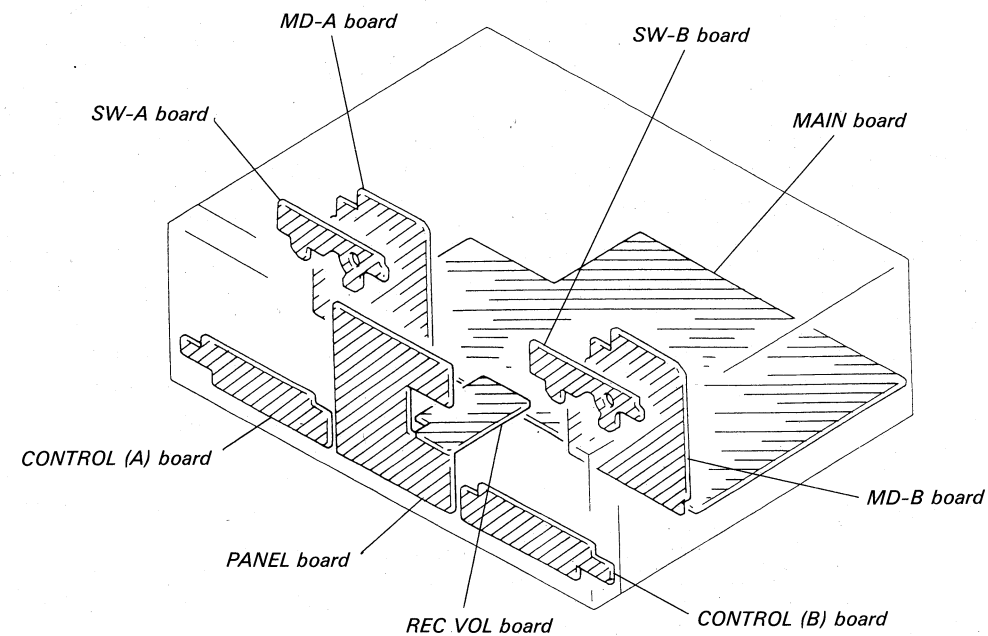


MAIN BOARD (COMPONENT SIDE)



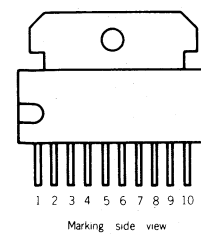
SECTION 5 DIAGRAMS

CUIT BOARDS LOCATION

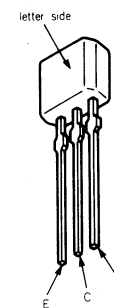


5-2. SEMICONDUCTOR LEAD LAYOUTS

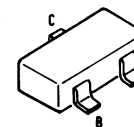
TA7272P



2SA1175-HFE
2SC3623A-LK
DTC144ES



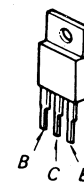
2SA1602



2SB1013-4



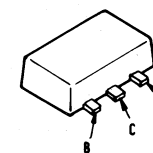
2SB1094-LK
2SD2012



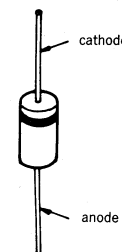
2SC2603-EF
DTA114ES
DTA144ES
DTC114ES
DTC143TS



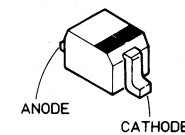
2SD1622-S



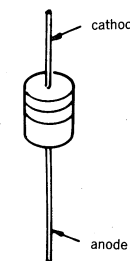
1N4148M
10E2N



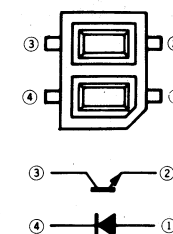
1SS355



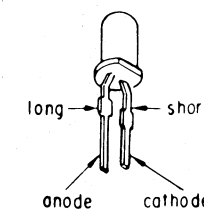
HZS6A1L
HZS7A1L
HZS9A2L



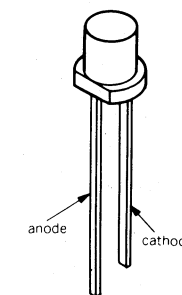
NJL5165K-B



SEL2210S-C



SEL2213C-C



5-3. PRINTED WIRING BOARDS – MAIN section –

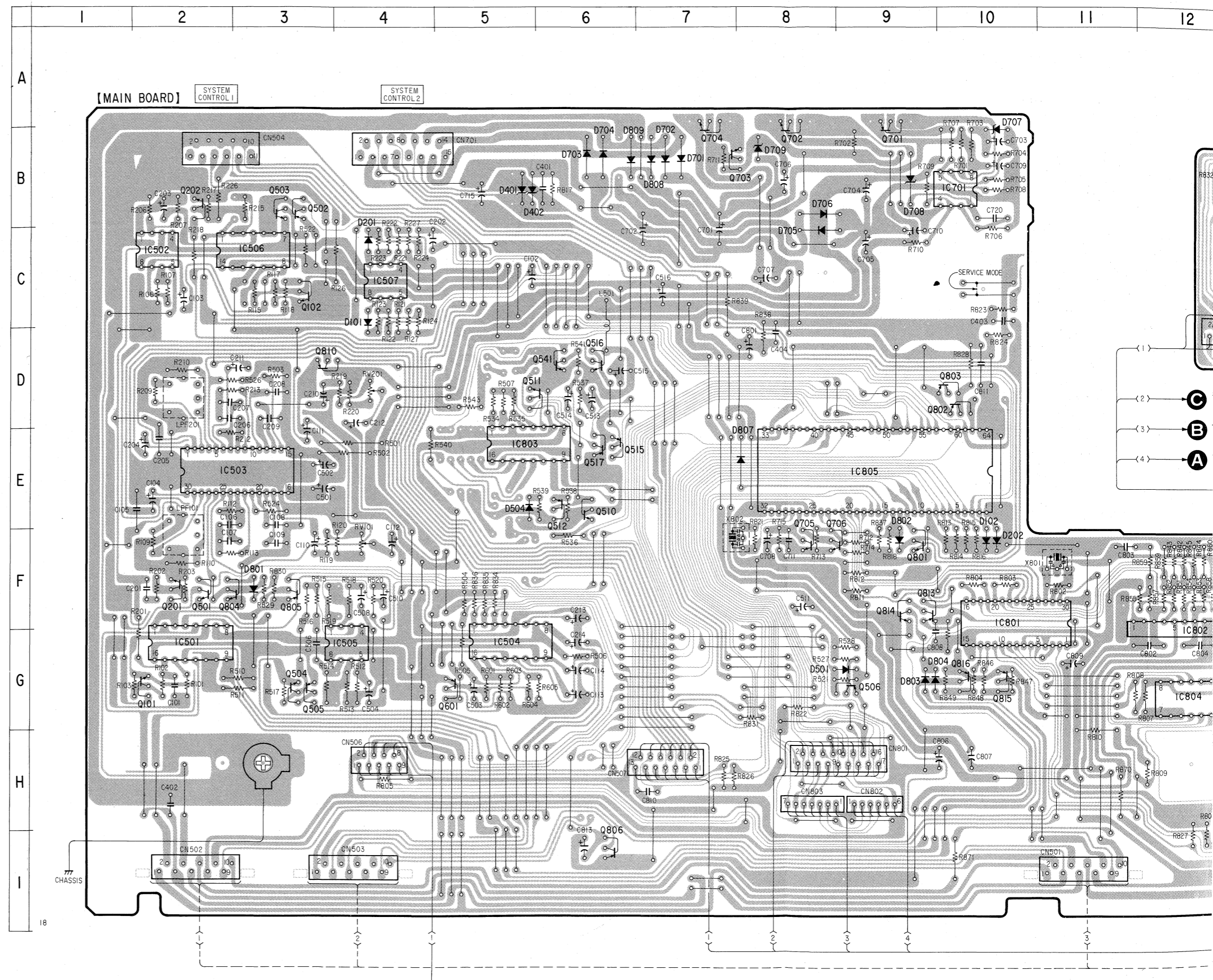
• See page 10,11 Circuit boards location and Semiconductor lead layouts.

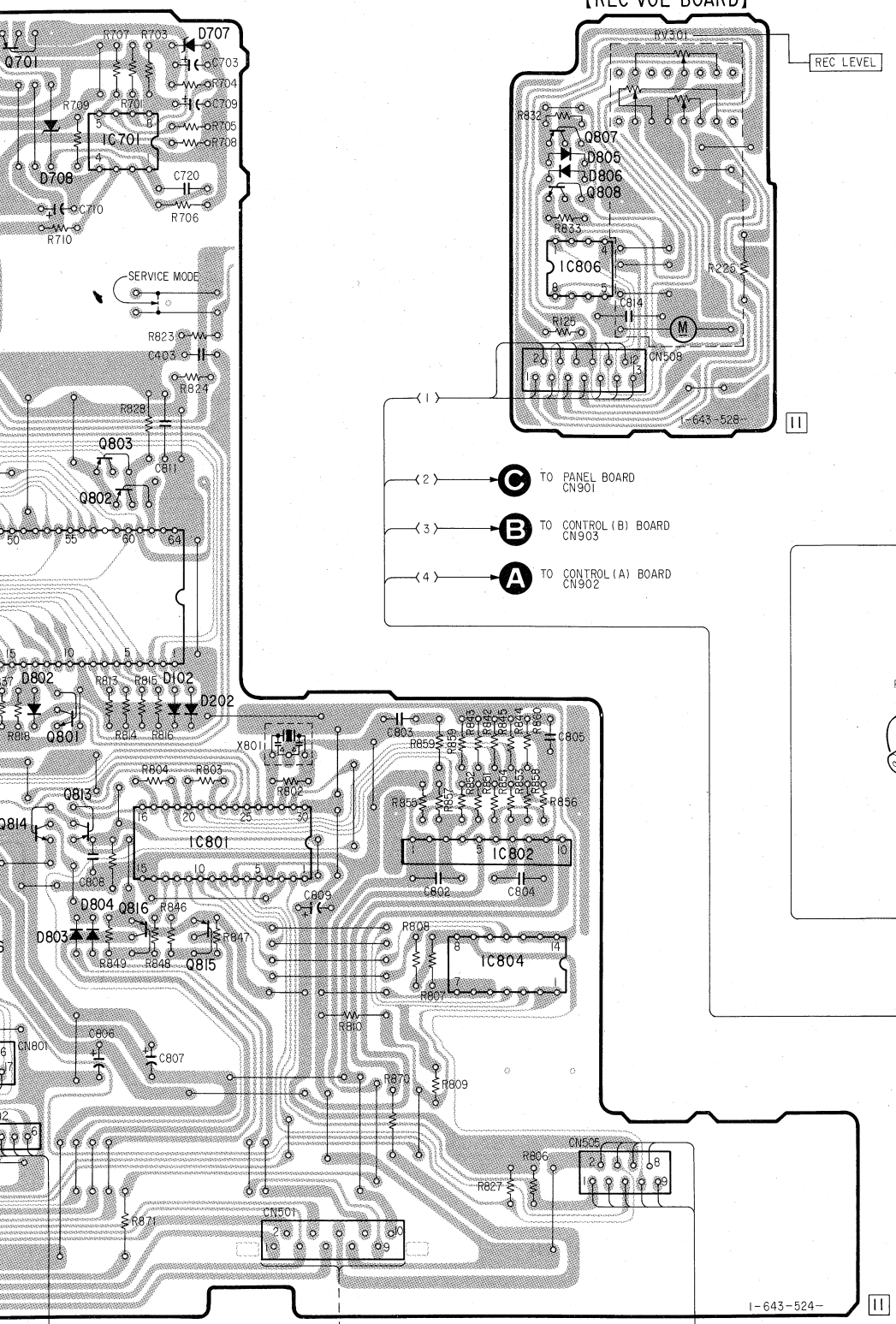
● Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D31	G-23	Q51	E-24
D101	C-4	Q52	E-24
D102	F-10	Q53	F-24
D201	C-4	Q71(MD-A)	G-19
D202	F-10	Q71(MD-B)	G-27
D401	B-5	Q101	G-2
D402	B-5	Q102	C-3
D501	G-9	Q201	F-2
D504	E-5	Q202	B-2
D701	B-7	Q501	F-2
D702	B-7	Q502	B-3
D703	B-6	Q503	B-3
D704	B-6	Q504	G-3
D705	B-8	Q505	G-3
D706	B-8	Q506	G-9
D707	B-10	Q510	E-6
D708	B-9	Q511	D-6
D709	B-8	Q512	E-9
D801	F-3	Q514	D-6
D802	F-9	Q515	E-6
D803	G-9	Q516	D-6
D804	G-10	Q601	G-5
D805	B-12	Q701	A-9
D806	B-12	Q702	A-8
D807	E-8	Q703	B-8
D808	B-7	Q704	A-7
D809	B-6	Q705	F-8
		Q706	F-9
IC31(MD-A)	G-17	Q801	F-9
IC31(MD-B)	G-24	Q802	D-10
IC81(SW-A)	C-22	Q803	D-10
IC81(SW-B)	C-29	Q804	F-3
IC501	G-2	Q805	F-3
IC502	C-2	Q806	I-6
IC503	E-3	Q807	B-12
IC504	G-5	Q808	B-12
IC505	G-4	Q810	D-3
IC506	C-3	Q813	F-9
IC507	C-4	Q814	F-9
IC701	B-10	Q815	G-10
IC801	F-10	Q816	G-10
IC802	F-12		
IC803	E-5		
IC804	G-12		
IC805	E-9		
IC806	B-12		

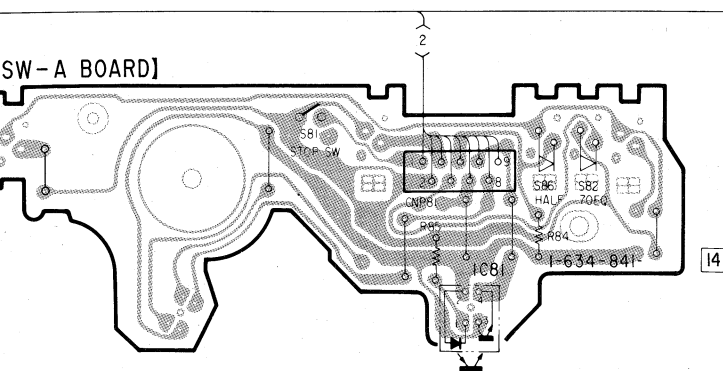
Note:

• ○ — : parts extracted from the component side.

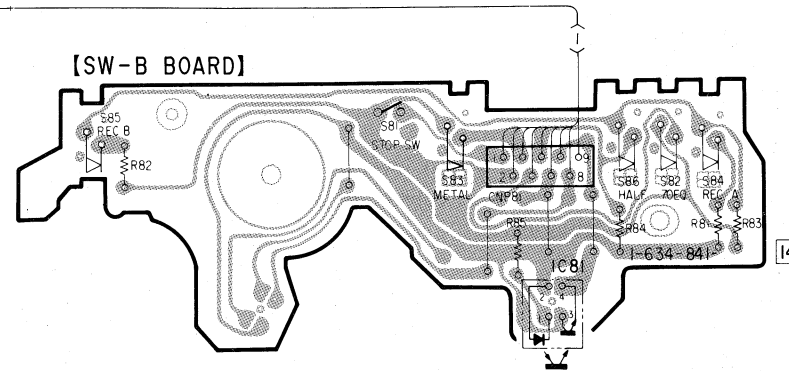




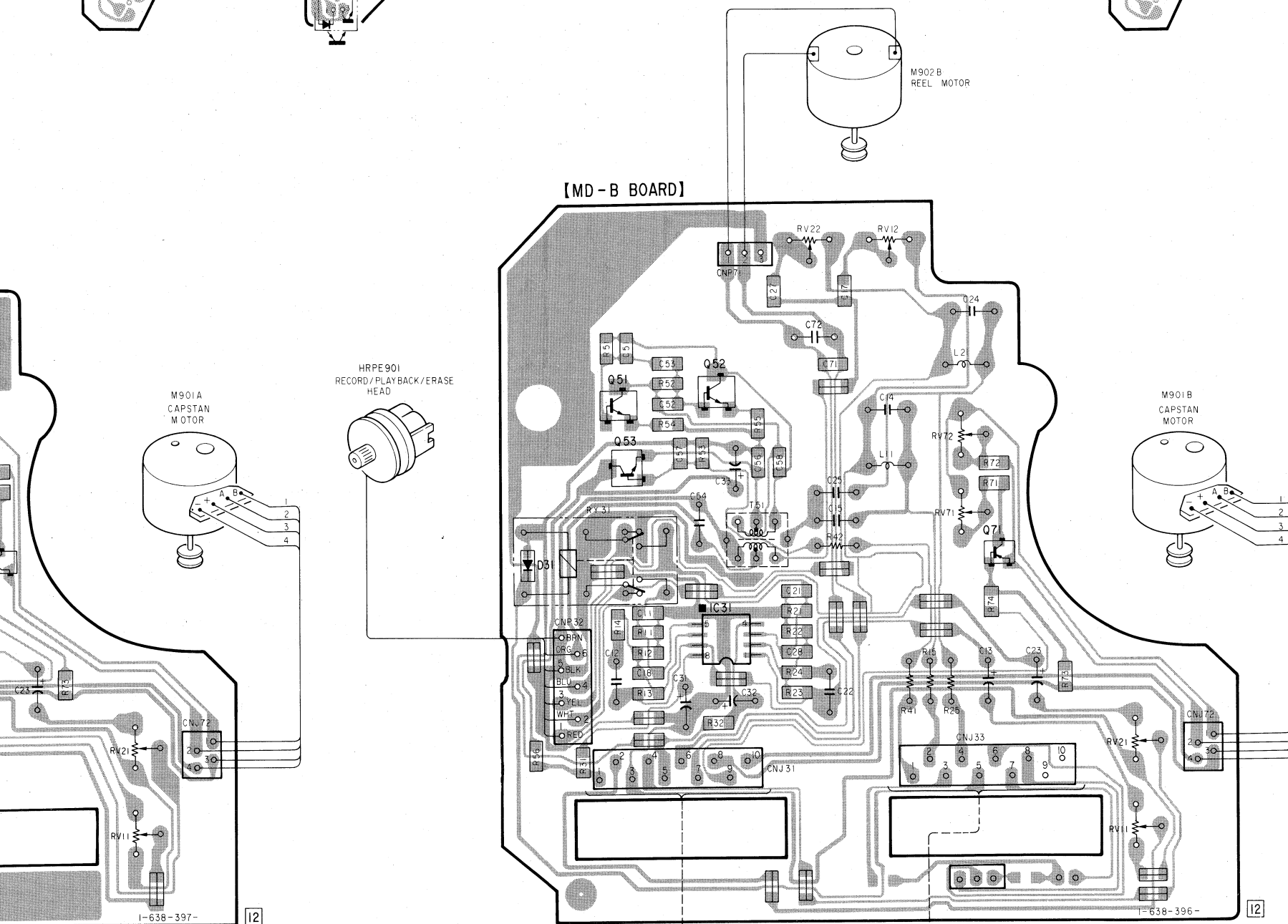
[SW-A BOARD]



[SW-B BOARD]



[MD-B BOARD]



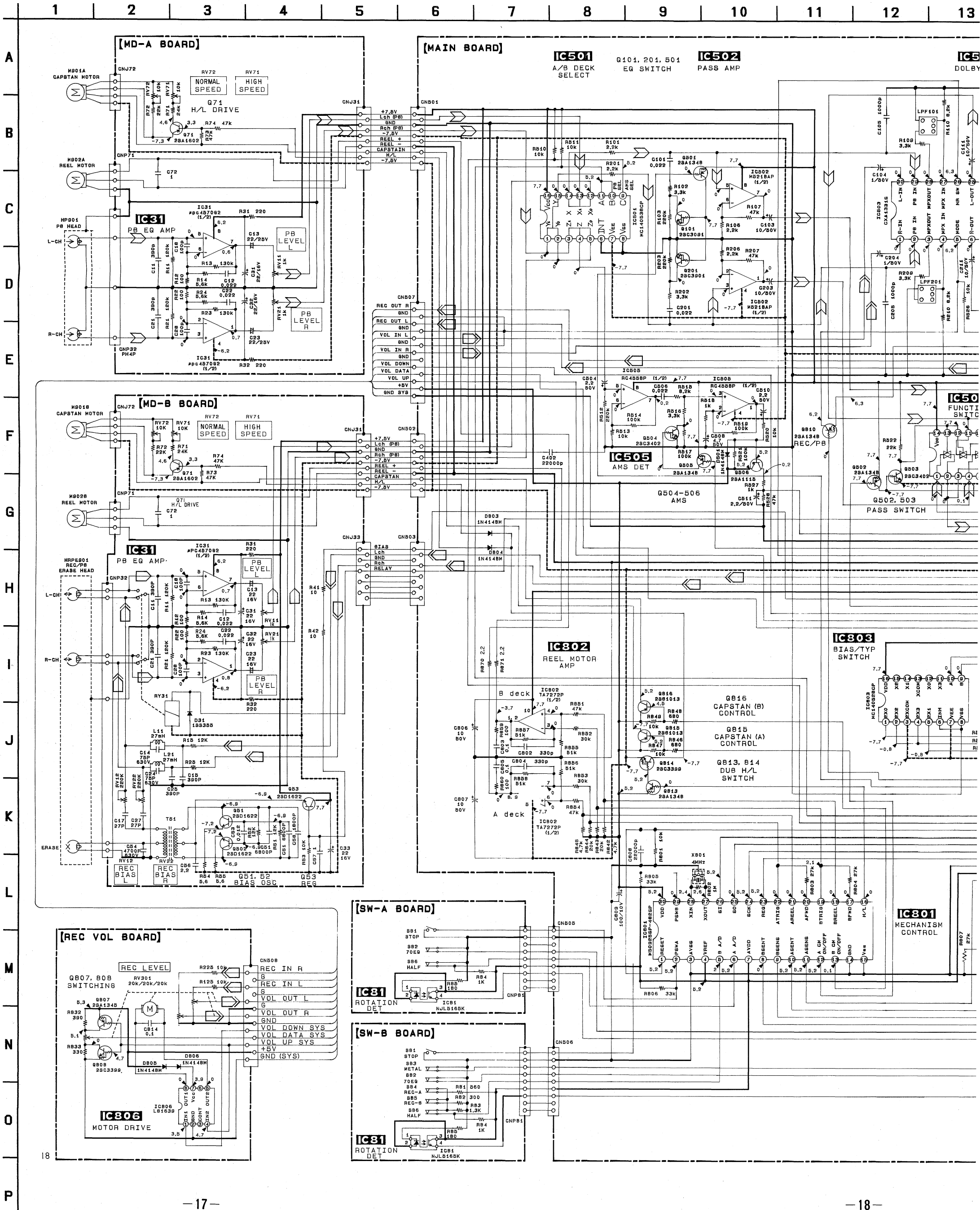
DECK-B

5-4. SCHEMATIC DIAGRAMS - MAIN section -




Note:

- All capacitors are in μF unless otherwise noted. pF: μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
- \triangle : internal component.
- \square : nonflammable resistor.
- --- : B+ Line
- --- : B- Line
- \square : adjustment for repair.

- Voltage is dc with re under no-signal (detun no mark: REC
- Voltages are taken wit Voltage variations ma tion tolerances.
- Signal path.
 - \triangleright : PB (DECK A)
 - \square : PB (DECK B)
 - \triangleright : REC (DECK



air.

-  : PB (DECK A)
 : PB (DECK B)
 : REC (DECK B)

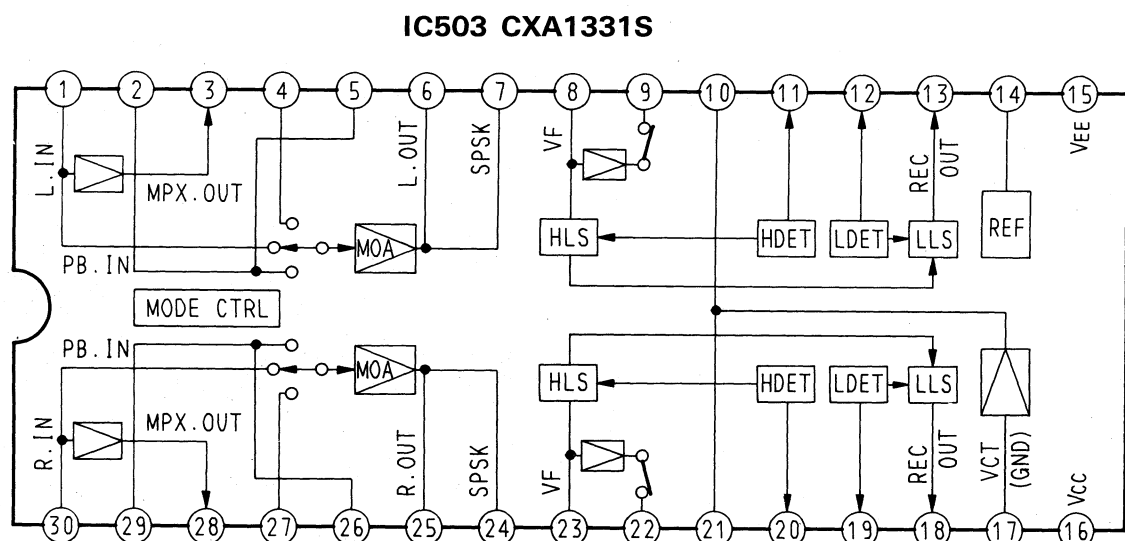
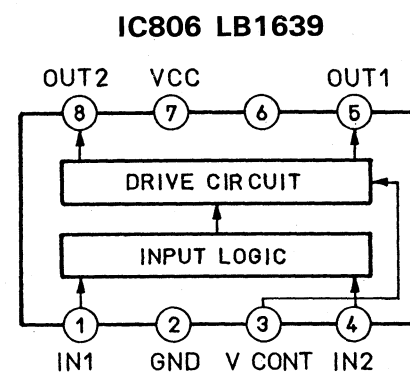
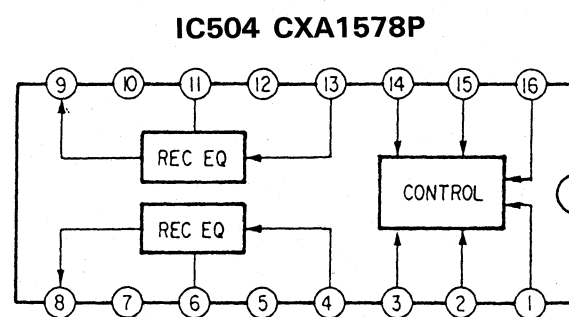
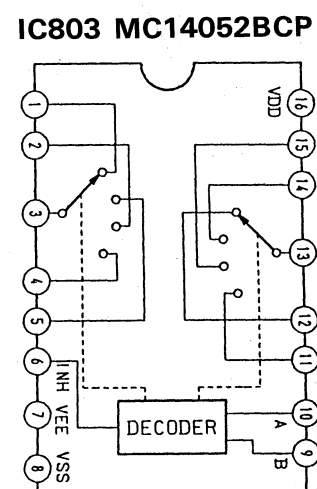
— 19 —



IC501 μ PD4053BC

Pin 1: B1
Pin 2: B0
Pin 3: C1
Pin 4: C.COM
Pin 5: C0
Pin 6: INH
Pin 7: VEE
Pin 8: VSS
Pin 9: C
Pin 10: B
Pin 11: A
Pin 12: A0
Pin 13: A1
Pin 14: A.COM
Pin 15: B.COM
Pin 16: VDD

Internal connections and switches are shown, with three switches labeled "OPEN".



5-5. PRINTED WIRING BOARDS - PANEL section -

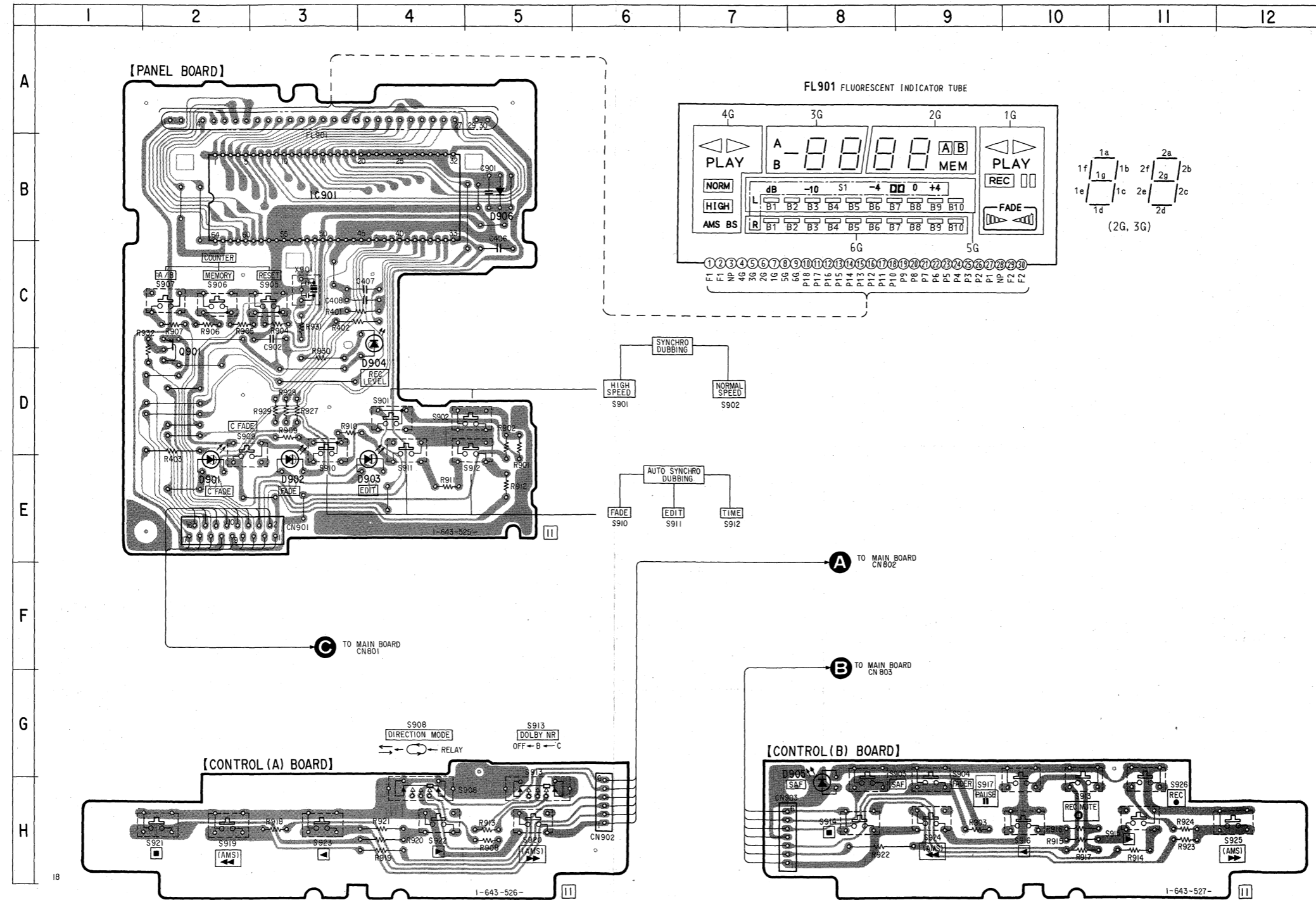
• See page 10,11 Circuit boards location and Semiconductor lead layouts.

Note:

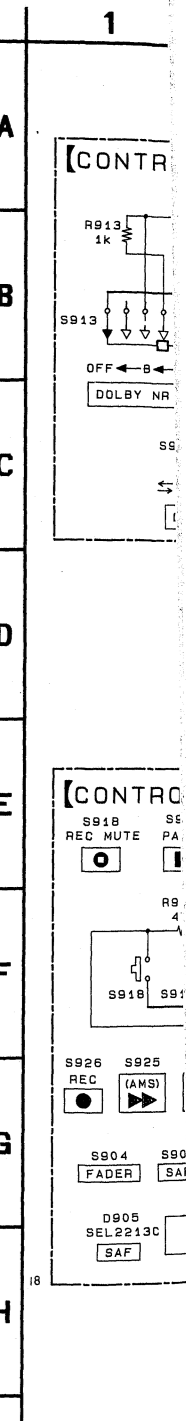
• — : parts extracted from the component side.

• Semiconductor Location


Ref. No.	Location
D901	E-2
D902	E-3
D903	E-4
D904	D-4
D905	H-8
D906	B-5
IC901	B-3
Q501	D-2

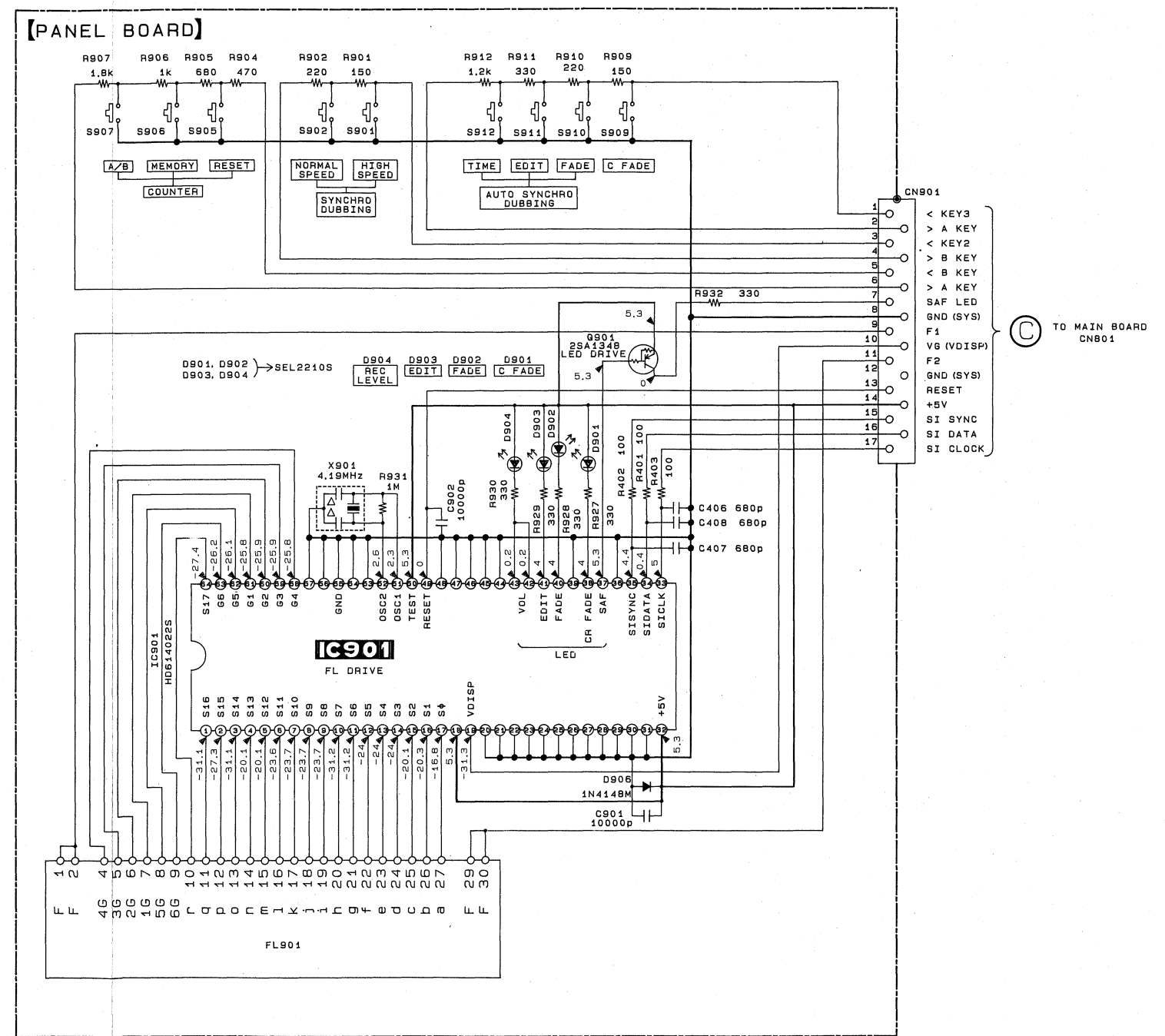


5-6. SCHEMA



[illegible]

- All capacitors are in μF unless otherwise noted. $\text{pF} : \mu\text{F}$ 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
- \triangle : internal component.
-  : B+ Line
- Voltage is dc with respect to ground under no-signal (detuned) conditions.
no mark : REC
- Voltages are taken with a VOM (Input Impedance $10\text{M}\Omega$).
Voltage variations may be noted due to normal production tolerances.



SECTION 6 EXPLODED VIEWS

NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.

- Color Indication of Appearance Parts

Example:

KNOB, BALANCE(WHITE)...(RED)

↑ ↑
Parts color Cabinet's color

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- hardware (#mark) list is given in the last of this parts list.

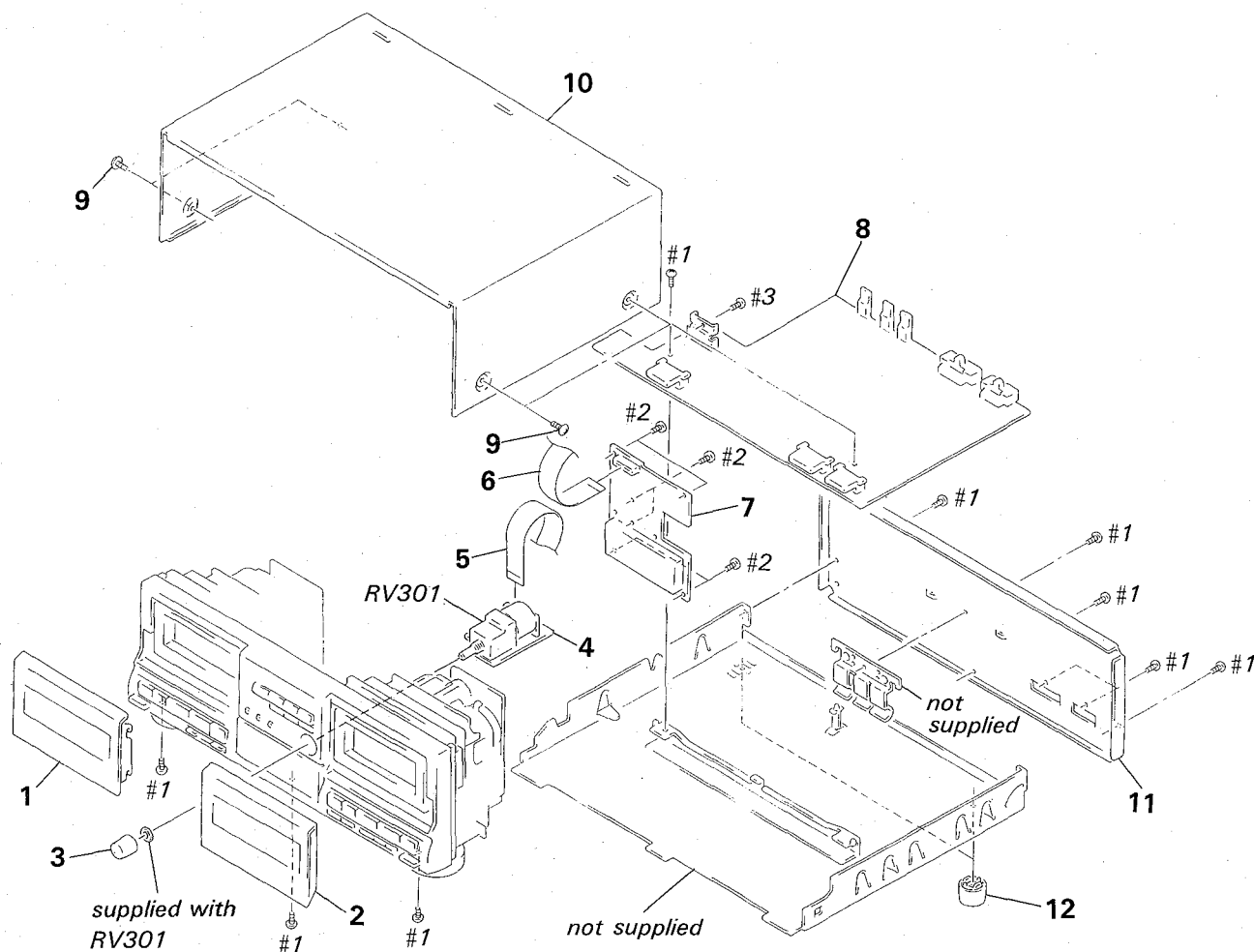
G:Germany

EA:Saudi Arabia

IT:Italian

AUS:Australian

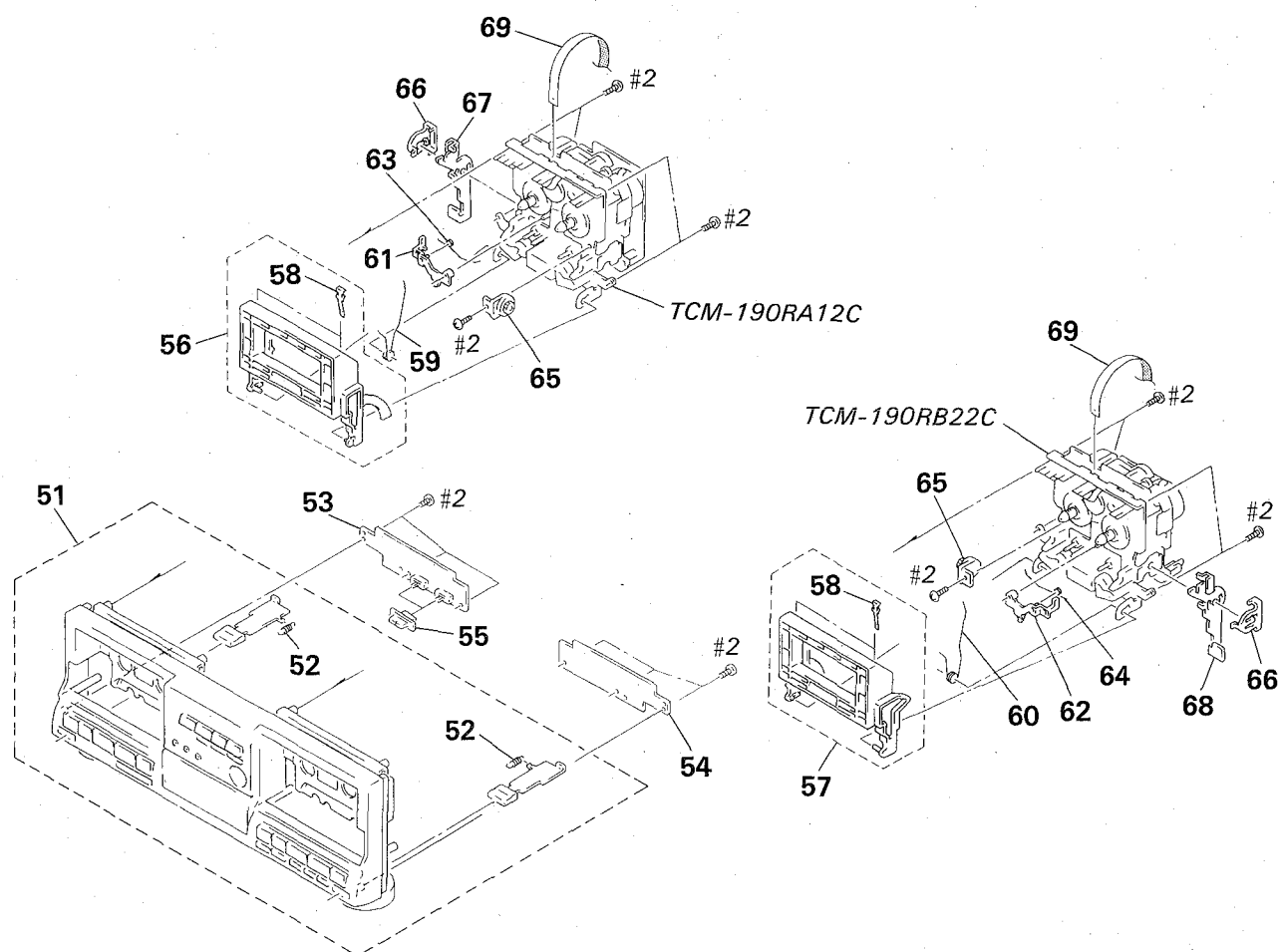
6-1. OVERALL SECTION



Ref. No.	Part No.	Description	Remark
1	X-3364-710-1	LID (A) ASSY, CASSETTE (AEP, G, UK, E, EA, AUS)	
1	X-3364-711-1	LID (A) ASSY, CASSETTE (IT)	
2	X-3364-714-1	LID (B) ASSY, CASSETTE (AEP, G, UK, E, EA, AUS)	
2	X-3364-718-1	LID (B) ASSY, CASSETTE (IT)	
3	4-950-651-21	KNOB (DIA. 16). ROUND (IT)	
3	4-950-651-31	KNOB (DIA. 16). ROUND (AEP, G, UK, E, EA, AUS)	
* 4	1-643-528-11	REC VOL BOARD	
* 5	1-574-726-11	WIRE, FLAT TYPE (13 CORE)	

Ref. No.	Part No.	Description	Remark
6	1-690-907-11	WIRE (FLAT TYPE) (17 CORE)	
* 7	A-2006-747-A	PANEL BOARD, COMPLETE	
* 8	A-2006-746-A	MAIN BOARD, COMPLETE	
9	3-363-099-01	SCREW (CASE +3X8 TP2)	
* 10	4-939-803-31	CASE (AEP, G, UK, E, EA, AUS)	
* 10	4-939-803-71	CASE (IT)	
* 11	3-377-136-31	PANEL, BACK (AEP, IT, UK, E, EA, AUS)	
* 11	3-377-136-41	PANEL, BACK (G)	
12	4-931-169-01	FOOT	
RV301	1-241-891-11	RES, VAR, CARBON 20KX3 (REC LEVEL)	

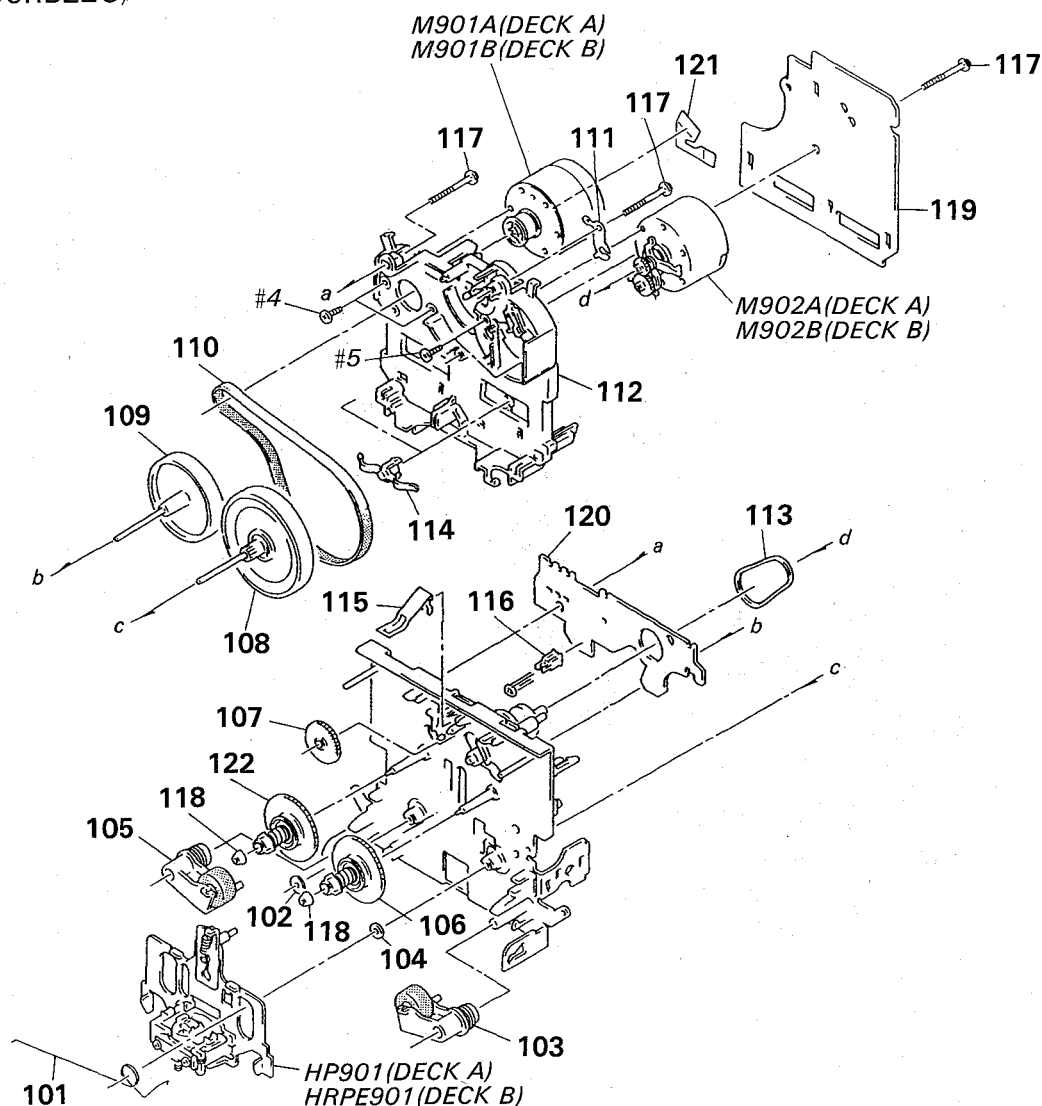
6-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	X-3364-708-1	PANEL ASSY, FRONT (AEP, G, UK, E, EA, AUS)	
51	X-3364-709-1	PANEL ASSY, FRONT (IT)	
52	3-662-752-21	SPRING, TENSION	
* 53	1-643-526-11	CONTROL (A) BOARD	
* 54	1-643-527-11	CONTROL (B) BOARD	
55	3-377-120-01	KNOB (SLIDE) (AEP, G, UK, E, EA, AUS)	
55	3-377-120-11	KNOB (SLIDE) (IT)	
56	X-3340-194-1	HOLDER (L) ASSY, CASSETTE	
57	X-3340-195-1	HOLDER (R) ASSY, CASSETTE	
58	3-308-823-11	SPRING	
59	3-354-959-01	SPRING (LOADING L), TORSION	

Ref. No.	Part No.	Description	Remark
60	3-354-960-01	SPRING (LOADING R), TORSION	
61	3-354-955-01	LEVER (EJ SAFTY LEVER L)	
62	3-354-956-01	LEVER (EJ SAFTY LEVER R)	
63	3-354-961-01	SPRING (EJ SAFTY SPRING L)	
64	3-354-962-01	SPRING (EJ SAFTY SPRING R)	
65	3-354-963-01	DAMPER	
66	3-354-957-01	JOINT (LOCK LEVER)	
* 67	3-363-638-01	LEVER (LOCK LEVER L)	
* 68	3-363-639-01	LEVER (LOCK LEVER R)	
69	1-690-906-11	WIRE (FLAT TYPE) (9 CORE)	

6-3. MECHANISM SECTION 1

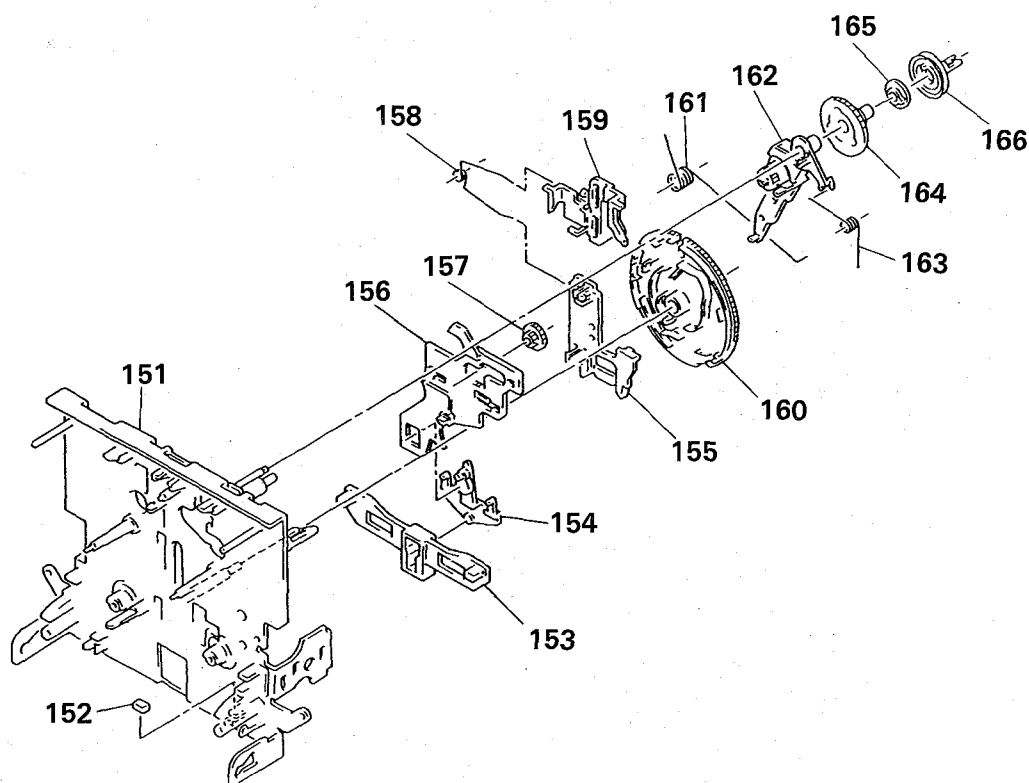
(TCM-190RA12C)
(TCM-190RB22C)

Ref. No.	Part No.	Description	Remark
101	3-359-455-01	SPRING, TORSION	
102	3-356-714-01	WASHER	
103	X-3359-408-1	LEVER (PINCH LEVER FWD) ASSY	
104	3-356-713-01	WASHER	
105	X-3359-409-1	LEVER (PINCH LEVER REV) ASSY	
106	X-3359-404-1	TABLE ASSY, REEL	
107	3-359-424-01	GEAR (REV GEAR)	
108	X-3359-406-1	FLYWHEEL (FWD) COMPLETE ASSY (DECK A)	
108	X-3364-554-1	FLYWHEEL (FWD) ASSY (DECK B)	
109	X-3359-410-1	FLYWHEEL (REV) ASSY	
110	3-359-417-01	BELT (FLAT), CAPSTAN	
111	3-359-450-01	PLATE, GROUND	
* 112	3-359-436-01	BASE (THRUST RETAINER), FITTING	
113	3-359-466-01	BELT (FR), SQUARE	
114	3-575-321-00	RETAINER, THRUST, CAPSTAN	
115	3-359-430-01	SPRING (CASSETTE RETAINER), LEAF	

Ref. No.	Part No.	Description	Remark
116	3-343-419-01	HOLDER (S SENSER A)	
117	3-359-414-01	SCREW (+PTPW 2X23)	
118	3-362-308-01	CAP (REEL)	
* 119	A-2006-399-A	MD-A BOARD, COMPLETE (DECK A)	
* 119	A-2006-400-A	MD-B BOARD, COMPLETE (DECK B)	
* 120	1-634-841-14	SW-A BOARD (DECK A)	
* 120	1-634-841-14	SW-B BOARD (DECK B)	
121	1-638-983-11	MOTOR FLEXIBLE BOARD	
122	X-3362-078-1	TABLE ASSY (B), REEL	
HP901	A-2003-837-A	BASE ASSY, HEAD (PB) (DECK A)	
HRPE901A	2003-838-A	BASE ASSY, HEAD (REC/PB/ERASE) (DECK B)	
M901A	X-3359-417-1	MOTOR ASSY (CAPSTAN) (DECK A)	
M901B	X-3359-417-1	MOTOR ASSY (CAPSTAN) (DECK B)	
M902A	X-3363-501-1	MOTOR ASSY (REEL) (DECK A)	
M902B	X-3363-501-1	MOTOR ASSY (REEL) (DECK B)	

6-4. MECHANISM SECTION 2

(TCM-190RA12C)
(TCM-190RB22C)



Ref. No.	Part No.	Description	Remark
151	X-3363-790-1	CHASSIS ASSY. MECHANICAL (DECK A)	
151	X-3359-415-1	CHASSIS ASSY. MECHANICAL (DECK B)	
152	3-359-469-01	SPACER	
* 153	3-359-425-01	SLIDER (REVERSE SLIDER)	
154	3-359-426-01	LEVER (REVERSE LEVER)	
* 155	3-359-427-01	SLIDER (LEVERSE SLIDER)	
* 156	3-359-415-01	SLIDER (TRIGGER SLIDER)	
157	3-359-448-01	GEAR (TRIGGER)	
158	3-359-454-01	SPRING, TORSION	

Ref. No.	Part No.	Description	Remark
159	3-359-429-01	SLIDER (BRAKE PLATE)	
160	3-359-420-01	GEAR (CAM GEAR)	
161	3-359-456-01	SPRING (TRIGGER SPRING), TORSION	
162	X-3359-405-1	LEVER (FR ARM) ASSY	
163	3-359-453-01	SPRING (FR ARM), TORSION	
164	3-359-419-01	GEAR (FR GEAR)	
165	3-359-421-01	CLUTCH (REEL DISK)	
166	3-359-418-01	PULLEY (FR PULLEY)	

SECTION 7



ELECTRICAL PARTS LIST


CONTROL (A)**CONTROL (B)****MAIN****NOTE:**

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- **RESISTORS**
All resistors are in ohms
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- **SEMICONDUCTORS**
In each case, u: μ , for example:
uA...: μ A..., uPA...: μ PA...,
uPB...: μ PB..., uPC...: μ PC...,
uPD...: μ PD...
- **CAPACITORS**
uF: μ F
- **COILS**
uH: μ H

When indication parts by reference number, please include the board name.

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
*	1-643-526-11	CONTROL (A) BOARD *****	
		< CONNECTOR >	
* CN902	1-564-499-11	PIN, CONNECTOR 6P	
		< RESISTOR >	
R908	1-249-424-11	CARBON 3.9K 5% 1/4W	
R913	1-249-417-11	CARBON 1K 5% 1/4W	
R918	1-249-415-11	CARBON 680 5% 1/4W	
R919	1-249-417-11	CARBON 1K 5% 1/4W	
R920	1-249-407-11	CARBON 150 5% 1/4W	
R921	1-249-409-11	CARBON 220 5% 1/4W	
		< SWITCH >	
S908	1-572-378-11	SWITCH, SLIDE (DIRECTION MODE)	
S913	1-572-378-11	SWITCH, SLIDE (DOLBY NR)	
S919	1-554-303-21	SWITCH, TACTILE (AMS REW)	
S920	1-554-303-21	SWITCH, TACTILE (AMS FF)	
S921	1-554-303-21	SWITCH, TACTILE (STOP)	
S922	1-554-303-21	SWITCH, TACTILE (FWD)	
S923	1-554-303-21	SWITCH, TACTILE (REW)	

*	1-643-527-11	CONTROL (B) BOARD *****	
		< CONNECTOR >	
* CN903	1-564-500-11	PIN, CONNECTOR 7P	
		< DIODE >	
D905	8-719-302-23	DIODE SEL2213C-C	

Ref. No.	Part No.	Description	Remark
		< RESISTOR >	
R903	1-249-411-11	CARBON 330 5% 1/4W	
R914	1-249-407-11	CARBON 150 5% 1/4W	
R915	1-249-409-11	CARBON 220 5% 1/4W	
R916	1-249-411-11	CARBON 330 5% 1/4W	
R917	1-249-413-11	CARBON 470 5% 1/4W	
R922	1-249-419-11	CARBON 1.5K 5% 1/4W	
R923	1-249-417-11	CARBON 1K 5% 1/4W	
R924	1-249-420-11	CARBON 1.8K 5% 1/4W	
		< SWITCH >	
S903	1-554-303-21	SWITCH, TACTILE (SAF)	
S904	1-554-303-21	SWITCH, TACTILE (FADER)	
S914	1-554-303-21	SWITCH, TACTILE (STOP)	
S915	1-554-303-21	SWITCH, TACTILE (FWD)	
S916	1-554-303-21	SWITCH, TACTILE (REV)	
S917	1-554-303-21	SWITCH, TACTILE (PAUSE)	
S918	1-554-303-21	SWITCH, TACTILE (REC MUTE)	
S924	1-554-303-21	SWITCH, TACTILE (AMS REW)	
S925	1-554-303-21	SWITCH, TACTILE (AMS FF)	
S926	1-554-303-21	SWITCH, TACTILE (REC)	

*	A-2006-746-A	MAIN BOARD, COMPLETE *****	
		< CAPACITOR >	
C101	1-136-157-00	FILM 0.022uF 5% 50V	
C102	1-126-161-11	ELECT 2.2uF 20% 50V	
C103	1-126-059-11	ELECT 10uF 20% 50V	
C104	1-126-301-11	ELECT 1uF 20% 50V	
C105	1-162-294-31	CERAMIC 0.001uF 10% 50V	

MAIN

Ref. No.	Part No.	Description	Remark		
C106	1-130-475-00	MYLAR	0.0022uF	5%	50V
C107	1-130-475-00	MYLAR	0.0022uF	5%	50V
C108	1-136-174-00	FILM	0.56uF	5%	50V
C109	1-136-171-00	FILM	0.33uF	5%	50V
C110	1-126-059-11	ELECT	10uF	20%	50V
C111	1-126-059-11	ELECT	10uF	20%	50V
C112	1-126-162-11	ELECT	3.3uF	20%	50V
C113	1-126-300-11	ELECT	0.47uF	20%	50V
C114	1-126-059-11	ELECT	10uF	20%	50V
C201	1-136-157-00	FILM	0.022uF	5%	50V
C202	1-126-161-11	ELECT	2.2uF	20%	50V
C203	1-126-059-11	ELECT	10uF	20%	50V
C204	1-126-301-11	ELECT	1uF	20%	50V
C205	1-162-294-31	CERAMIC	0.001uF	10%	50V
C206	1-130-475-00	MYLAR	0.0022uF	5%	50V
C207	1-130-475-00	MYLAR	0.0022uF	5%	50V
C208	1-136-174-00	FILM	0.56uF	5%	50V
C209	1-136-171-00	FILM	0.33uF	5%	50V
C210	1-126-059-11	ELECT	10uF	20%	50V
C211	1-126-059-11	ELECT	10uF	20%	50V
C212	1-126-162-11	ELECT	3.3uF	20%	50V
C213	1-126-300-11	ELECT	0.47uF	20%	50V
C214	1-126-059-11	ELECT	10uF	20%	50V
C401	1-164-159-11	CERAMIC	0.1uF		50V
C402	1-101-005-00	CERAMIC	22000PF		50V
C403	1-101-005-00	CERAMIC	22000PF		50V
C404	1-101-005-00	CERAMIC	22000PF		50V
C501	1-124-994-11	ELECT	100uF	20%	10V
C502	1-124-994-11	ELECT	100uF	20%	10V
C503	1-126-059-11	ELECT	10uF	20%	50V
C504	1-126-161-11	ELECT	2.2uF	20%	50V
C508	1-126-163-11	ELECT	4.7uF	20%	50V
C510	1-126-161-11	ELECT	2.2uF	20%	50V
C511	1-126-161-11	ELECT	2.2uF	20%	50V
C513	1-126-161-11	ELECT	2.2uF	20%	50V
C514	1-124-910-11	ELECT	47uF	20%	50V
C515	1-124-478-11	ELECT	100uF	20%	25V
C516	1-124-478-11	ELECT	100uF	20%	25V
C506	1-161-494-00	CERAMIC	0.022uF		25V
C701	1-124-887-00	ELECT	3300uF	20%	16V
C702	1-124-887-00	ELECT	3300uF	20%	16V
C703	1-126-101-11	ELECT	100uF	20%	16V
C704	1-124-473-11	ELECT	1000uF	20%	10V
C705	1-124-473-11	ELECT	1000uF	20%	10V
C706	1-126-161-11	ELECT	2.2uF	20%	50V
C707	1-124-472-11	ELECT	470uF	20%	10V
C708	1-126-301-11	ELECT	1uF	20%	50V
C709	1-126-301-11	ELECT	1uF	20%	50V
C710	1-126-301-11	ELECT	1uF	20%	50V

Ref. No.	Part No.	Description	Remark		
C711	1-101-005-00	CERAMIC	22000PF		50V
C712	1-126-867-11	ELECT	33uF	20%	50V
C720	1-162-215-31	CERAMIC	47PF	5%	50V
C801	1-126-161-11	ELECT	2.2uF	20%	50V
C802	1-162-288-31	CERAMIC	330PF	10%	50V
C803	1-136-165-00	FILM	0.1uF	5%	50V
C804	1-162-288-31	CERAMIC	330PF	10%	50V
C805	1-136-165-00	FILM	0.1uF	5%	50V
C806	1-126-059-11	ELECT	10uF	20%	50V
C807	1-126-059-11	ELECT	10uF	20%	50V
C808	1-101-005-00	CERAMIC	22000PF		50V
C809	1-124-994-11	ELECT	100uF	20%	10V
C810	1-136-165-00	FILM	0.1uF	5%	50V
C811	1-161-379-00	CERAMIC	0.01uF	20%	25V
C813	1-126-161-11	ELECT	2.2uF	20%	50V

< CONNECTOR >

* CN501	1-580-784-11	CONNECTOR, BOARD TO BOARD
* CN502	1-580-784-11	CONNECTOR, BOARD TO BOARD
* CN503	1-580-784-11	CONNECTOR, BOARD TO BOARD
* CN504	1-566-858-11	SOCKET, CONNECTOR 11P
* CN505	1-568-828-11	SOCKET, CONNECTOR 9P
* CN506	1-568-828-11	SOCKET, CONNECTOR 9P
* CN507	1-568-832-11	SOCKET, CONNECTOR 13P
* CN701	1-566-859-11	SOCKET, CONNECTOR 15P
* CN801	1-568-836-11	SOCKET, CONNECTOR 17P
* CN802	1-564-340-00	PIN, CONNECTOR 6P
* CN803	1-564-341-11	PIN, CONNECTOR 7P

< DIODE >

D101	8-719-987-63	DIODE	1N4148M
D102	8-719-987-63	DIODE	1N4148M
D201	8-719-987-63	DIODE	1N4148M
D202	8-719-987-63	DIODE	1N4148M
D401	8-719-933-54	DIODE	HZS9A2L
D402	8-719-933-54	DIODE	HZS9A2L
D501	8-719-987-63	DIODE	1N4148M
D504	8-719-987-63	DIODE	1N4148M
D701	8-719-200-77	DIODE	10E2N
D702	8-719-200-77	DIODE	10E2N
D703	8-719-200-77	DIODE	10E2N
D704	8-719-200-77	DIODE	10E2N
D705	8-719-200-77	DIODE	10E2N
D706	8-719-200-77	DIODE	10E2N
D707	8-719-933-33	DIODE	HZS6A1L
D708	8-719-933-33	DIODE	HZS6A1L
D709	8-719-000-78	DIODE	UZL-7L2
D801	8-719-933-54	DIODE	HZS9A2L

Ref. No.	Part No.	Description	Remark
D802	8-719-987-63	DIODE 1N4148M	
D803	8-719-987-63	DIODE 1N4148M	
D804	8-719-987-63	DIODE 1N4148M	
D807	8-719-987-63	DIODE 1N4148M	
D808	8-719-987-63	DIODE 1N4148M	
D809	8-719-987-63	DIODE 1N4148M	
< IC >			
IC501	8-759-140-53	IC UPD4053BC	
IC502	8-759-634-51	IC M5218AP	
IC503	8-752-059-55	IC CXA1331S	
IC504	8-752-055-61	IC CXA1578P	
IC505	8-759-945-58	IC RC4558P	
IC506	8-759-000-49	IC MC14066BCP	
IC507	8-759-945-58	IC RC4558P	
IC701	8-759-945-58	IC RC4558P	
IC801	8-759-635-94	IC M50925SP-482SP	
IC802	8-759-207-05	IC TA7272P	
IC803	8-759-000-48	IC MC14052BCP	
IC804	8-759-240-71	IC TC4071BP	
IC805	8-759-067-45	IC M50944-180SP	
< COIL >			
L501	1-408-080-00	INDUCTOR 100uH	
< LOW PASS FILTER >			
LPF101	1-236-087-11	FILTER, LOW PASS	
LPF201	1-236-087-11	FILTER, LOW PASS	
< TRANSISTOR >			
Q101	8-729-900-74	TRANSISTOR DTC143TS	
Q102	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q201	8-729-900-74	TRANSISTOR DTC143TS	
Q202	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q501	8-729-900-61	TRANSISTOR DTA114ES	
Q502	8-729-900-61	TRANSISTOR DTA114ES	
Q503	8-729-900-80	TRANSISTOR DTC114ES	
Q504	8-729-900-80	TRANSISTOR DTC114ES	
Q505	8-729-900-61	TRANSISTOR DTA114ES	
Q506	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q510	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q511	8-729-900-80	TRANSISTOR DTC114ES	
Q512	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q514	8-729-900-74	TRANSISTOR DTC143TS	
Q515	8-729-900-61	TRANSISTOR DTA114ES	
Q516	8-729-900-80	TRANSISTOR DTC114ES	
Q517	8-729-900-61	TRANSISTOR DTA114ES	
Q601	8-729-900-65	TRANSISTOR DTA144ES	

Ref. No.	Part No.	Description	Remark
Q701	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q702	8-729-209-15	TRANSISTOR 2SD2012	
Q703	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q704	8-729-209-15	TRANSISTOR 2SD2012	
Q705	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q706	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q801	8-729-900-80	TRANSISTOR DTC114ES	
Q802	8-729-900-61	TRANSISTOR DTA114ES	
Q803	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q804	8-729-900-89	TRANSISTOR DTC144ES	
Q805	8-729-900-65	TRANSISTOR DTA144ES	
Q806	8-729-900-61	TRANSISTOR DTA114ES	
Q810	8-729-900-61	TRANSISTOR DTA114ES	
Q813	8-729-900-61	TRANSISTOR DTA114ES	
Q814	8-729-900-89	TRANSISTOR DTC144ES	
Q815	8-729-801-84	TRANSISTOR 2SB1013-4	
Q816	8-729-801-84	TRANSISTOR 2SB1013-4	
< RESISTOR >			
R101	1-249-421-11	CARBON 2.2K 5% 1/4W	
R102	1-249-423-11	CARBON 3.3K 5% 1/4W	
R103	1-247-887-00	CARBON 220K 5% 1/4W	
R106	1-249-421-11	CARBON 2.2K 5% 1/4W	
R107	1-249-437-11	CARBON 47K 5% 1/4W	
R109	1-249-423-11	CARBON 3.3K 5% 1/4W	
R110	1-249-428-11	CARBON 8.2K 5% 1/4W	
R112	1-247-864-11	CARBON 24K 5% 1/4W	
R113	1-249-414-11	CARBON 560 5% 1/4W	
R115	1-249-421-11	CARBON 2.2K 5% 1/4W	
R117	1-249-431-11	CARBON 15K 5% 1/4W	
R118	1-249-421-11	CARBON 2.2K 5% 1/4W	
R119	1-249-429-11	CARBON 10K 5% 1/4W	
R120	1-249-421-11	CARBON 2.2K 5% 1/4W	
R121	1-249-417-11	CARBON 1K 5% 1/4W	
R122	1-249-436-11	CARBON 39K 5% 1/4W	
R123	1-249-432-11	CARBON 18K 5% 1/4W	
R124	1-249-410-11	CARBON 270 5% 1/4W	
R126	1-249-417-11	CARBON 1K 5% 1/4W	
R127	1-249-429-11	CARBON 10K 5% 1/4W	
R201	1-249-421-11	CARBON 2.2K 5% 1/4W	
R202	1-249-423-11	CARBON 3.3K 5% 1/4W	
R203	1-247-887-00	CARBON 220K 5% 1/4W	
R206	1-249-421-11	CARBON 2.2K 5% 1/4W	
R207	1-249-437-11	CARBON 47K 5% 1/4W	
R209	1-249-423-11	CARBON 3.3K 5% 1/4W	
R210	1-249-428-11	CARBON 8.2K 5% 1/4W	
R212	1-247-864-11	CARBON 24K 5% 1/4W	
R213	1-249-414-11	CARBON 560 5% 1/4W	
R215	1-249-421-11	CARBON 2.2K 5% 1/4W	

MAIN

Ref. No.	Part No.	Description	Remark		
R217	1-249-431-11	CARBON	15K	5%	1/4W
R218	1-249-421-11	CARBON	2.2K	5%	1/4W
R219	1-249-429-11	CARBON	10K	5%	1/4W
R220	1-249-421-11	CARBON	2.2K	5%	1/4W
R221	1-249-417-11	CARBON	1K	5%	1/4W
R222	1-249-436-11	CARBON	39K	5%	1/4W
R223	1-249-432-11	CARBON	18K	5%	1/4W
R224	1-249-410-11	CARBON	270	5%	1/4W
R226	1-249-417-11	CARBON	1K	5%	1/4W
R227	1-249-429-11	CARBON	10K	5%	1/4W
R501	1-249-405-11	CARBON	100	5%	1/4W
R502	1-249-405-11	CARBON	100	5%	1/4W
R503	1-249-434-11	CARBON	27K	5%	1/4W
R504	1-249-429-11	CARBON	10K	5%	1/4W
R505	1-249-413-11	CARBON	470	5%	1/4W
R506	1-247-864-11	CARBON	24K	5%	1/4W
R507	1-247-887-00	CARBON	220K	5%	1/4W
R510	1-249-429-11	CARBON	10K	5%	1/4W
R511	1-249-429-11	CARBON	10K	5%	1/4W
R512	1-247-887-00	CARBON	220K	5%	1/4W
R513	1-249-429-11	CARBON	10K	5%	1/4W
R514	1-249-441-11	CARBON	100K	5%	1/4W
R515	1-249-428-11	CARBON	8.2K	5%	1/4W
R516	1-249-423-11	CARBON	3.3K	5%	1/4W
R517	1-249-441-11	CARBON	100K	5%	1/4W
R518	1-249-417-11	CARBON	1K	5%	1/4W
R519	1-249-441-11	CARBON	100K	5%	1/4W
R520	1-249-429-11	CARBON	10K	5%	1/4W
R521	1-249-441-11	CARBON	100K	5%	1/4W
R522	1-249-433-11	CARBON	22K	5%	1/4W
R524	1-249-417-11	CARBON	1K	5%	1/4W
R526	1-249-429-11	CARBON	10K	5%	1/4W
R527	1-249-417-11	CARBON	1K	5%	1/4W
R528	1-249-437-11	CARBON	47K	5%	1/4W
R534	1-247-882-11	CARBON	130K	5%	1/4W
R535	1-249-440-11	CARBON	82K	5%	1/4W
R536	1-249-405-11	CARBON	100	5%	1/4W
R537	1-249-433-11	CARBON	22K	5%	1/4W
R538	1-249-425-11	CARBON	4.7K	5%	1/4W
R539	1-249-414-11	CARBON	560	5%	1/4W
R540	1-249-433-11	CARBON	22K	5%	1/4W
R541	1-249-407-11	CARBON	150	5%	1/4W
R543	1-249-433-11	CARBON	22K	5%	1/4W
R601	1-247-858-11	CARBON	13K	5%	1/4W
R602	1-247-844-11	CARBON	3.6K	5%	1/4W
R603	1-249-417-11	CARBON	1K	5%	1/4W
R604	1-247-862-11	CARBON	20K	5%	1/4W
R605	1-249-429-11	CARBON	10K	5%	1/4W
R701	1-249-413-11	CARBON	470	5%	1/4W

Ref. No.	Part No.	Description	Remark		
R702	1-249-413-11	CARBON	470	5%	1/4W
R703	1-249-422-11	CARBON	2.7K	5%	1/4W
R704	1-247-858-11	CARBON	13K	5%	1/4W
R705	1-249-429-11	CARBON	10K	5%	1/4W
R706	1-249-417-11	CARBON	1K	5%	1/4W
R707	1-247-850-11	CARBON	6.2K	5%	1/4W
R708	1-249-422-11	CARBON	2.7K	5%	1/4W
R709	1-249-429-11	CARBON	10K	5%	1/4W
R710	1-249-429-11	CARBON	10K	5%	1/4W
R711	1-249-421-11	CARBON	2.2K	5%	1/4W
R712	1-249-432-11	CARBON	18K	5%	1/4W
R713	1-249-423-11	CARBON	3.3K	5%	1/4W
R714	1-249-433-11	CARBON	22K	5%	1/4W
R715	1-249-435-11	CARBON	33K	5%	1/4W
R801	1-249-429-11	CARBON	10K	5%	1/4W
R802	1-247-903-00	CARBON	1M	5%	1/4W
R803	1-249-434-11	CARBON	27K	5%	1/4W
R804	1-249-434-11	CARBON	27K	5%	1/4W
R805	1-249-435-11	CARBON	33K	5%	1/4W
R806	1-249-435-11	CARBON	33K	5%	1/4W
R807	1-249-434-11	CARBON	27K	5%	1/4W
R808	1-247-895-00	CARBON	470K	5%	1/4W
R809	1-247-895-00	CARBON	470K	5%	1/4W
R810	1-249-434-11	CARBON	27K	5%	1/4W
R811	1-249-435-11	CARBON	33K	5%	1/4W
R812	1-249-435-11	CARBON	33K	5%	1/4W
R813	1-249-421-11	CARBON	2.2K	5%	1/4W
R814	1-249-421-11	CARBON	2.2K	5%	1/4W
R815	1-249-421-11	CARBON	2.2K	5%	1/4W
R816	1-249-421-11	CARBON	2.2K	5%	1/4W
R817	1-249-393-11	CARBON	10	5%	1/4W
R818	1-249-435-11	CARBON	33K	5%	1/4W
R821	1-247-903-00	CARBON	1M	5%	1/4W
R822	1-249-435-11	CARBON	33K	5%	1/4W
R823	1-249-425-11	CARBON	4.7K	5%	1/4W
R824	1-249-435-11	CARBON	33K	5%	1/4W
R825	1-249-429-11	CARBON	10K	5%	1/4W
R826	1-249-420-11	CARBON	1.8K	5%	1/4W
R827	1-249-435-11	CARBON	33K	5%	1/4W
R828	1-249-433-11	CARBON	22K	5%	1/4W
R829	1-249-433-11	CARBON	22K	5%	1/4W
R830	1-249-433-11	CARBON	22K	5%	1/4W
R831	1-249-421-11	CARBON	2.2K	5%	1/4W
R834	1-249-425-11	CARBON	4.7K	5%	1/4W
R835	1-249-435-11	CARBON	33K	5%	1/4W
R836	1-249-435-11	CARBON	33K	5%	1/4W
R837	1-249-433-11	CARBON	22K	5%	1/4W
R838	1-249-422-11	CARBON	2.7K	5%	1/4W

MAIN

MD-A

MD-B

Ref. No.	Part No.	Description	Remark
R839	1-249-405-11	CARBON 100 5% 1/4W	
R842	1-249-425-11	CARBON 4.7K 5% 1/4W	
R843	1-247-862-11	CARBON 20K 5% 1/4W	
R844	1-247-862-11	CARBON 20K 5% 1/4W	
R845	1-249-425-11	CARBON 4.7K 5% 1/4W	
R846	1-249-415-11	CARBON 680 5% 1/4W	
R847	1-249-429-11	CARBON 10K 5% 1/4W	
R848	1-249-415-11	CARBON 680 5% 1/4W	
R849	1-249-429-11	CARBON 10K 5% 1/4W	
R851	1-249-437-11	CARBON 47K 5% 1/4W	
R852	1-247-866-11	CARBON 30K 5% 1/4W	
R853	1-247-866-11	CARBON 30K 5% 1/4W	
R854	1-249-437-11	CARBON 47K 5% 1/4W	
R855	1-247-872-11	CARBON 51K 5% 1/4W	
R856	1-247-872-11	CARBON 51K 5% 1/4W	
R857	1-247-872-11	CARBON 51K 5% 1/4W	
R858	1-247-872-11	CARBON 51K 5% 1/4W	
R859	1-249-405-11	CARBON 100 5% 1/4W	
R860	1-249-405-11	CARBON 100 5% 1/4W	
R870	1-247-688-11	CARBON 2.2 5% 1/4W	
R871	1-247-688-11	CARBON 2.2 5% 1/4W	

< VARIABLE RESISTOR >

RV101	1-238-600-11	RES. ADJ. CARBON 10K	
RV201	1-238-600-11	RES. ADJ. CARBON 10K	

< VIBRATOR >

X801	1-577-358-21	VIBRATOR, CERAMIC (4MHz)	
X802	1-577-358-21	VIBRATOR, CERAMIC (4MHz)	

* A-2006-399-A MD-A BOARD, COMPLETE

< CAPACITOR >

C11	1-163-131-00	CERAMIC CHIP 390PF 5% 50V	
C12	1-136-157-00	FILM 0.022uF 5% 50V	
C13	1-124-234-00	ELECT 22uF 20% 16V	
C18	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C21	1-163-131-00	CERAMIC CHIP 390PF 5% 50V	
C22	1-136-157-00	FILM 0.022uF 5% 50V	
C23	1-124-234-00	ELECT 22uF 20% 16V	
C28	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C31	1-124-234-00	ELECT 22uF 20% 16V	
C32	1-124-234-00	ELECT 22uF 20% 16V	
C72	1-124-499-11	ELECT, NONPOLAR 1uF 20% 50V	

Ref. No.	Part No.	Description	Remark
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< CONNECTOR >

* CNJ72	1-580-411-11	SOCKET, CONNECTOR 4P	
* CNP32	1-580-772-11	PIN, CONNECTOR (PC BOARD) 4P	
* CNP71	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P	

< IC >

IC31	8-759-106-02	IC uPC4570G2	
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< JUMPER >

JW1	1-216-295-00	METAL CHIP 0 5% 1/10W	
JW51	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW52	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW53	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW54	1-216-296-00	METAL CHIP 0 5% 1/8W	

< TRANSISTOR >

Q71	8-729-602-36	TRANSISTOR 2SA1602	
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< RESISTOR >

R11	1-216-099-00	METAL CHIP 120K 5% 1/10W	
R12	1-216-025-00	METAL CHIP 100 5% 1/10W	
R13	1-216-100-00	METAL GLAZE 130K 5% 1/10W	
R14	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R21	1-216-099-00	METAL CHIP 120K 5% 1/10W	
R22	1-216-025-00	METAL CHIP 100 5% 1/10W	
R23	1-216-100-00	METAL GLAZE 130K 5% 1/10W	
R24	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R31	1-216-033-00	METAL CHIP 220 5% 1/10W	
R32	1-216-033-00	METAL CHIP 220 5% 1/10W	
R71	1-216-082-00	METAL GLAZE 24K 5% 1/10W	
R72	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R73	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R74	1-216-089-00	METAL CHIP 47K 5% 1/10W	

< VARIABLE RESISTOR >

RV11	1-238-012-11	RES. ADJ. CARBON 1K	
RV21	1-238-012-11	RES. ADJ. CARBON 1K	
RV71	1-238-016-11	RES. ADJ. CARBON 10K	
RV72	1-238-016-11	RES. ADJ. CARBON 10K	

* A-2006-400-A MD-B BOARD, COMPLETE

< CAPACITOR >

C11	1-163-131-00	CERAMIC CHIP 390PF 5% 50V	
C12	1-136-157-00	FILM 0.022uF 5% 50V	
C13	1-124-234-00	ELECT 22uF 20% 16V	
C14	1-136-273-91	FILM 75PF 5% 630V	

Ref. No.	Part No.	Description	Remark
C15	1-164-080-11	CERAMIC 390PF 10% 50V	
C17	1-163-103-00	CERAMIC CHIP 27PF 5% 50V	
C18	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C21	1-163-131-00	CERAMIC CHIP 390PF 5% 50V	
C22	1-136-157-00	FILM 0.022uF 5% 50V	
C23	1-124-234-00	ELECT 22uF 20% 16V	
C24	1-136-273-91	FILM 75PF 5% 630V	
C25	1-164-080-11	CERAMIC 390PF 10% 50V	
C27	1-163-103-00	CERAMIC CHIP 27PF 5% 50V	
C28	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C31	1-124-234-00	ELECT 22uF 20% 16V	
C32	1-124-234-00	ELECT 22uF 20% 16V	
C33	1-124-234-00	ELECT 22uF 20% 16V	
C51	1-163-019-00	CERAMIC CHIP 0.0068uF 10% 50V	
C52	1-163-019-00	CERAMIC CHIP 0.0068uF 10% 50V	
C53	1-163-022-00	CERAMIC CHIP 0.012uF 10% 50V	
C54	1-136-559-11	FILM 0.0047uF 5% 630V	
C56	1-164-505-11	CERAMIC CHIP 2.2uF 16V	
C57	1-164-346-11	CERAMIC CHIP 1uF 16V	
C58	1-163-024-00	CERAMIC CHIP 0.018uF 10% 50V	
C72	1-124-499-11	ELECT. NONPOLAR 1uF 20% 50V	
< CONNECTOR >			
* CNJ31	1-580-782-11	CONNECTOR, BOARD TO BOARD	
* CNJ33	1-580-782-11	CONNECTOR, BOARD TO BOARD	
* CNJ72	1-580-411-11	SOCKET, CONNECTOR 4P	
* CNP32	1-580-781-11	PIN, CONNECTOR (PC BOARD) 7P	
* CNP71	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P	
< DIODE >			
D31	8-719-988-62	DIODE 1SS355	
< IC >			
IC31	8-759-106-02	IC uPC4570G2	
< JUMPER >			
JW1	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW2	1-216-295-00	METAL CHIP 0 5% 1/10W	
JW3	1-216-295-00	METAL CHIP 0 5% 1/10W	
JW4	1-216-295-00	METAL CHIP 0 5% 1/10W	
JW5	1-216-295-00	METAL CHIP 0 5% 1/10W	
JW6	1-216-295-00	METAL CHIP 0 5% 1/10W	
JW7	1-216-295-00	METAL CHIP 0 5% 1/10W	
JW52	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW53	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW54	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW55	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW56	1-216-296-00	METAL CHIP 0 5% 1/8W	

Ref. No.	Part No.	Description	Remark
JW57	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW58	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW59	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW60	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW61	1-216-296-00	METAL CHIP 0 5% 1/8W	
< COIL >			
L11	1-410-780-11	INDUCTOR 27mH	
L21	1-410-780-11	INDUCTOR 27mH	
< TRANSISTOR >			
Q51	8-729-808-01	TRANSISTOR 2SD1622-S	
Q52	8-729-808-01	TRANSISTOR 2SD1622-S	
Q53	8-729-808-01	TRANSISTOR 2SD1622-S	
Q71	8-729-602-36	TRANSISTOR 2SA1602	
< RESISTOR >			
R11	1-216-099-00	METAL CHIP 120K 5% 1/10W	
R12	1-216-025-00	METAL CHIP 100 5% 1/10W	
R13	1-216-100-00	METAL GLAZE 130K 5% 1/10W	
R14	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R15	1-249-430-11	CARBON 12K 5% 1/4W	
R21	1-216-099-00	METAL CHIP 120K 5% 1/10W	
R22	1-216-025-00	METAL CHIP 100 5% 1/10W	
R23	1-216-100-00	METAL GLAZE 130K 5% 1/10W	
R24	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R25	1-249-430-11	CARBON 12K 5% 1/4W	
R31	1-216-033-00	METAL CHIP 220 5% 1/10W	
R32	1-216-033-00	METAL CHIP 220 5% 1/10W	
R41	1-249-393-11	CARBON 10 5% 1/4W	
R42	1-249-393-11	CARBON 10 5% 1/4W	
R51	1-216-075-00	METAL CHIP 12K 5% 1/10W	
R52	1-216-075-00	METAL CHIP 12K 5% 1/10W	
R53	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R54	1-216-309-00	METAL CHIP 5.6 5% 1/10W	
R55	1-216-309-00	METAL CHIP 5.6 5% 1/10W	
R56	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
R71	1-216-082-00	METAL GLAZE 24K 5% 1/10W	
R72	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R73	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R74	1-216-089-00	METAL CHIP 47K 5% 1/10W	
< VARIABLE RESISTOR >			
RV11	1-238-012-11	RES. ADJ. CARBON 1K	
RV12	1-238-551-11	RES. ADJ. CARBON 220K	
RV21	1-238-012-11	RES. ADJ. CARBON 1K	
RV22	1-238-551-11	RES. ADJ. CARBON 220K	
RV71	1-238-016-11	RES. ADJ. CARBON 10K	

MD-B

PANEL

RECVOL

Ref. No.	Part No.	Description	Remark
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RV72	1-238-016-11	RES. ADJ. CARBON 10K	
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< RELAY >

RY31	1-515-726-11	RELAY	
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< COIL >

T51	1-406-419-11	COIL, BIAS OSCILLATION	
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*	A-2006-747-A	PANEL BOARD, COMPLETE	

*	3-362-478-21	HOLDER (T), LED	
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*	4-921-941-01	CUSHION (FL)	
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*	4-933-646-01	HOLDER (TC), FL TUBE	
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< CAPACITOR >

C406	1-162-292-31	CERAMIC	680PF	10%	50V
C407	1-162-292-31	CERAMIC	680PF	10%	50V
C408	1-162-292-31	CERAMIC	680PF	10%	50V
C901	1-161-379-00	CERAMIC	0.01uF	20%	25V
C902	1-161-379-00	CERAMIC	0.01uF	20%	25V

< CONNECTOR >

* CN901	1-568-836-11	SOCKET, CONNECTOR 17P	
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< DIODE >

D901	8-719-301-38	LED	SEL2210S-C
D902	8-719-301-38	LED	SEL2210S-C
D903	8-719-301-38	LED	SEL2210S-C
D904	8-719-301-38	LED	SEL2210S-C
D906	8-719-987-63	DIODE	1N4148M

< FLUORESCENT INDICATOR >

FL901	1-519-741-11	INDICATOR TUBE, FLUORESCENT	
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< IC >

IC901	8-759-321-92	IC	HD614022S
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< TRANSISTOR >

Q901	8-729-900-61	TRANSISTOR	DTA114ES
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< RESISTOR >

R401	1-249-405-11	CARBON	100	5%	1/4W
R402	1-249-405-11	CARBON	100	5%	1/4W
R403	1-249-405-11	CARBON	100	5%	1/4W
R901	1-249-407-11	CARBON	150	5%	1/4W
R902	1-249-409-11	CARBON	220	5%	1/4W

Ref. No.	Part No.	Description	Remark
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R904	1-249-413-11	CARBON	470 5% 1/4W
R905	1-249-415-11	CARBON	680 5% 1/4W
R906	1-249-417-11	CARBON	1K 5% 1/4W
R907	1-249-420-11	CARBON	1.8K 5% 1/4W
R909	1-249-407-11	CARBON	150 5% 1/4W

R910	1-249-409-11	CARBON	220 5% 1/4W
R911	1-249-411-11	CARBON	330 5% 1/4W
R912	1-249-418-11	CARBON	1.2K 5% 1/4W
R927	1-249-411-11	CARBON	330 5% 1/4W
R928	1-249-411-11	CARBON	330 5% 1/4W

R929	1-249-411-11	CARBON	330 5% 1/4W
R930	1-249-411-11	CARBON	330 5% 1/4W
R931	1-247-903-00	CARBON	1M 5% 1/4W
R932	1-249-411-11	CARBON	330 5% 1/4W

< SWITCH >

S901	1-554-303-21	SWITCH, TACTILE (HIGH SPEED)
S902	1-554-303-21	SWITCH, TACTILE (NORMAL SPEED)
S905	1-554-303-21	SWITCH, TACTILE (RESET)
S906	1-554-303-21	SWITCH, TACTILE (MEMORY)
S907	1-554-303-21	SWITCH, TACTILE (A/B)
S909	1-554-303-21	SWITCH, TACTILE (C FADE)
S910	1-554-303-21	SWITCH, TACTILE (FADE)
S911	1-554-303-21	SWITCH, TACTILE (EDIT)
S912	1-554-303-21	SWITCH, TACTILE (TIME)

< VIBRATOR >

X901	1-567-775-11	VIBRATOR, CERAMIC (4.19MHz)
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*	1-643-528-11	RECVOL BOARD

< CAPACITOR >

C814	1-164-159-11	CERAMIC	0.1uF	50V
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< CONNECTOR >

* CN508	1-568-832-11	SOCKET, CONNECTOR 13P
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< DIODE >

D805	8-719-987-63	DIODE	1N4148M
D806	8-719-987-63	DIODE	1N4148M

< IC >

IC806	8-759-820-62	IC	LB1639
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< TRANSISTOR >

Q807	8-729-900-65	TRANSISTOR	DTA144ES
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RECVOL

SW-A

SW-B

Ref. No.	Part No.	Description	Remark
Q808	8-729-900-89	TRANSISTOR DTC144ES	
< RESISTOR >			
R125	1-249-429-11	CARBON 10K 5% 1/4W	
R225	1-249-429-11	CARBON 10K 5% 1/4W	
R832	1-249-412-11	CARBON 390 5% 1/4W	
R833	1-249-411-11	CARBON 330 5% 1/4W	
< VARIABLE RESISTOR >			
RV301	1-241-891-11	RES. VAR. CARBON 20KX3 (REC LEVEL)	

*	1-634-841-14	SW-A BOARD	

	3-343-419-01	HOLDER (S SENSER A)	
< CONNECTOR >			
* CNP81	1-568-852-11	SOCKET, CONNECTOR 9P	
< IC >			
IC81	8-719-710-03	DIODE NJL5165K-B	
< RESISTOR >			
R84	1-249-417-11	CARBON 1K 5% 1/4W	
R85	1-249-408-11	CARBON 180 5% 1/4W	
< SWITCH >			
S81	1-571-958-11	SWITCH, PUSH (1 KEY) (STOP)	
S82	1-571-281-21	SWITCH, LEAF (70EQ)	
S86	1-571-281-21	SWITCH, LEAF (HALF)	

*	1-634-841-14	SW-B BOARD	

	3-343-419-01	HOLDER (S SENSER A)	
< CONNECTOR >			
* CNP81	1-568-852-11	SOCKET, CONNECTOR 9P	
< IC >			
IC81	8-719-710-03	DIODE NJL5165K-B	
< RESISTOR >			
R81	1-249-414-11	CARBON 560 5% 1/4W	
R82	1-247-818-11	CARBON 300 5% 1/4W	
R83	1-247-834-11	CARBON 1.3K 5% 1/4W	
R84	1-249-417-11	CARBON 1K 5% 1/4W	

Ref. No.	Part No.	Description	Remark
R85	1-249-408-11	CARBON 180 5% 1/4W	
< SWITCH >			
S81	1-571-958-11	SWITCH, PUSH (1 KEY) (STOP)	
S82	1-571-281-21	SWITCH, LEAF (70EQ)	
S83	1-571-281-21	SWITCH, LEAF (METAL)	
S84	1-571-281-21	SWITCH, LEAF (REC A)	
S85	1-571-281-21	SWITCH, LEAF (REC B)	
S86	1-571-281-21	SWITCH, LEAF (HALF)	

MISCELLANEOUS			

* 5	1-574-726-11	WIRE, FLAT TYPE (13 CORE)	
6	1-690-907-11	WIRE (FLAT TYPE) (17 CORE)	
69	1-690-906-11	WIRE (FLAT TYPE) (9 CORE)	
121	1-638-983-11	MOTOR FLEXIBLE BOARD	
HP901	A-2003-837-A	BASE ASSY, HEAD (PB) (DECK A)	
HRPE901A	2003-838-A	BASE ASSY, HEAD (REC/PB/ERASE) (DECK B)	
M901A	X-3359-417-1	MOTOR ASSY (CAPSTAN) (DECK A)	
M901B	X-3359-417-1	MOTOR ASSY (CAPSTAN) (DECK B)	
M902A	X-3363-501-1	MOTOR ASSY (REEL) (DECK A)	
M902B	X-3363-501-1	MOTOR ASSY (REEL) (DECK B)	

ACCESSORIES & PACKING MATERIALS			

*	3-350-154-01	CUSHION	
	4-920-940-01	SHEET (A), PROTECTION	

HARDWARE LIST

#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S
#2	7-621-773-93	SCREW (PANEL 2.6 TP2)
#3	7-685-645-79	SCREW +BVTP 3X6 TYPE2 N-S
#4	7-621-775-00	SCREW +B 2.6X3
#5	7-627-556-08	SCREW +P 2.6X2.8